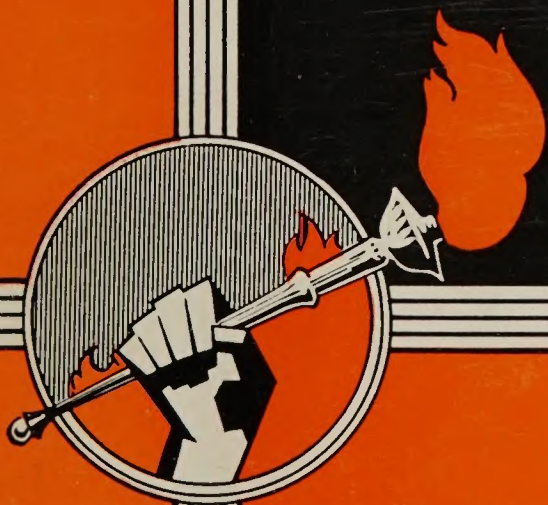


Brilliant Fire

HEATERS



..... *For*
ALL GASES



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

TESTED & APPROVED

A.G.A. APPROVAL. Refer to the "Directory of Approved Gas Appliances & Listed Accessories" as published by the American Gas Association each month. BRILLIANT FIRE Heaters are listed therein as and when models have been approved for certification.

LOOK FOR THE A. G. A. SEAL

**THE
OHIO FOUNDRY & MANUFACTURING CO.**

Established in 1846

STEUBENVILLE, OHIO, U.S.A.

C A T A L O G N o . 50 .

BRILLIANT FIRE GAS HEATERS

**THE OHIO FOUNDRY &
MANUFACTURING COMPANY**

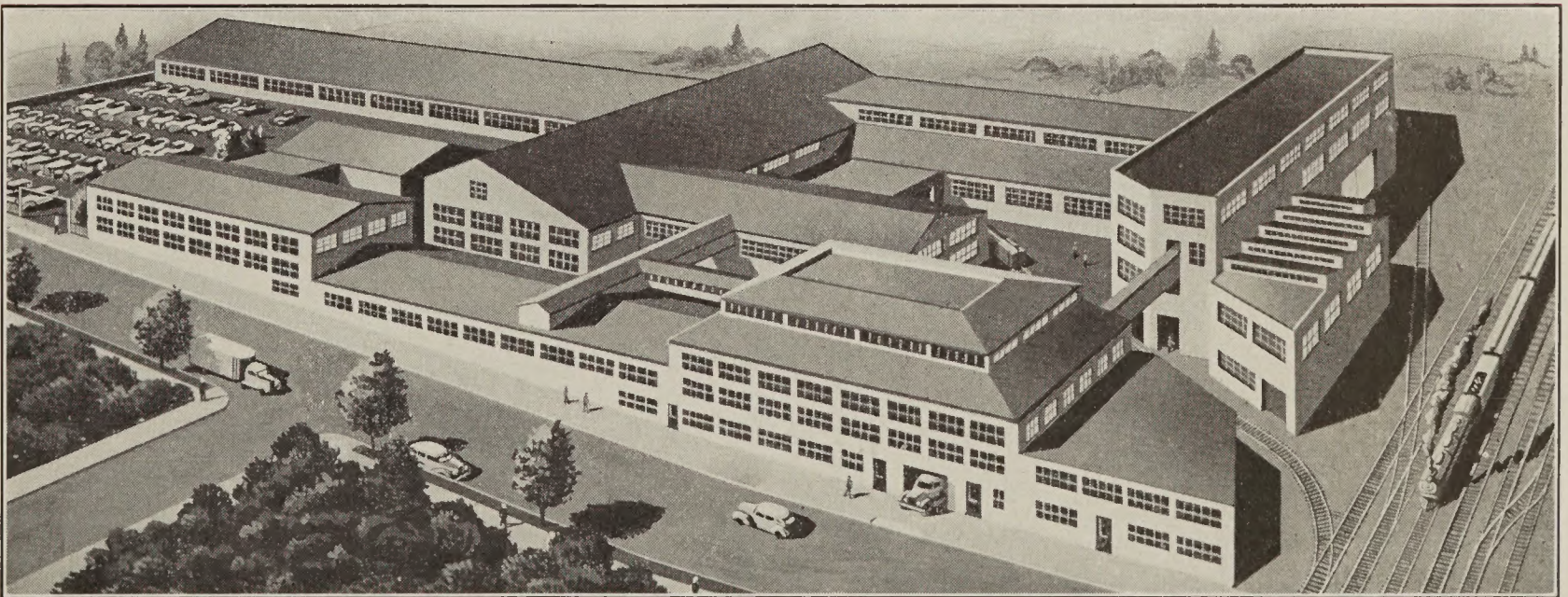
Designers - Manufacturers - Engineers

Executive Offices and Factory

P. O. Box 191 Slack St. & P.R.R. Phone 2-2751

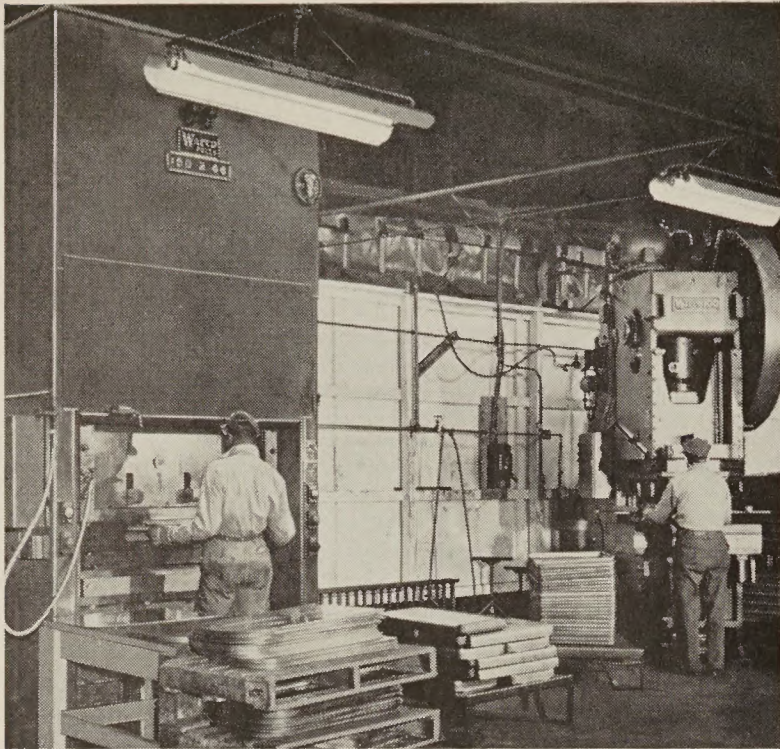
STEUBENVILLE, OHIO, U. S. A.

Sales Representatives & Distributors from Coast to Coast

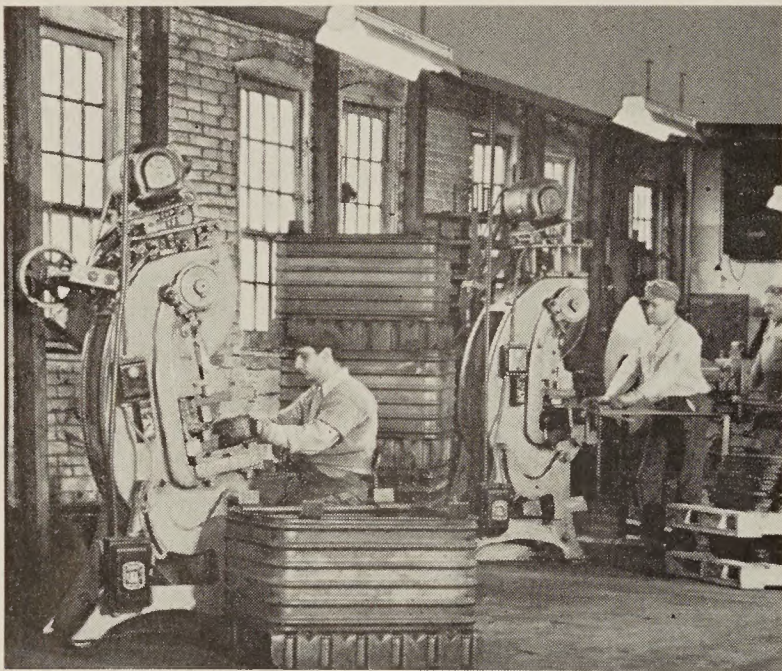


E S T A B L I S H E D I N 1 8 4 6

For OVER A CENTURY

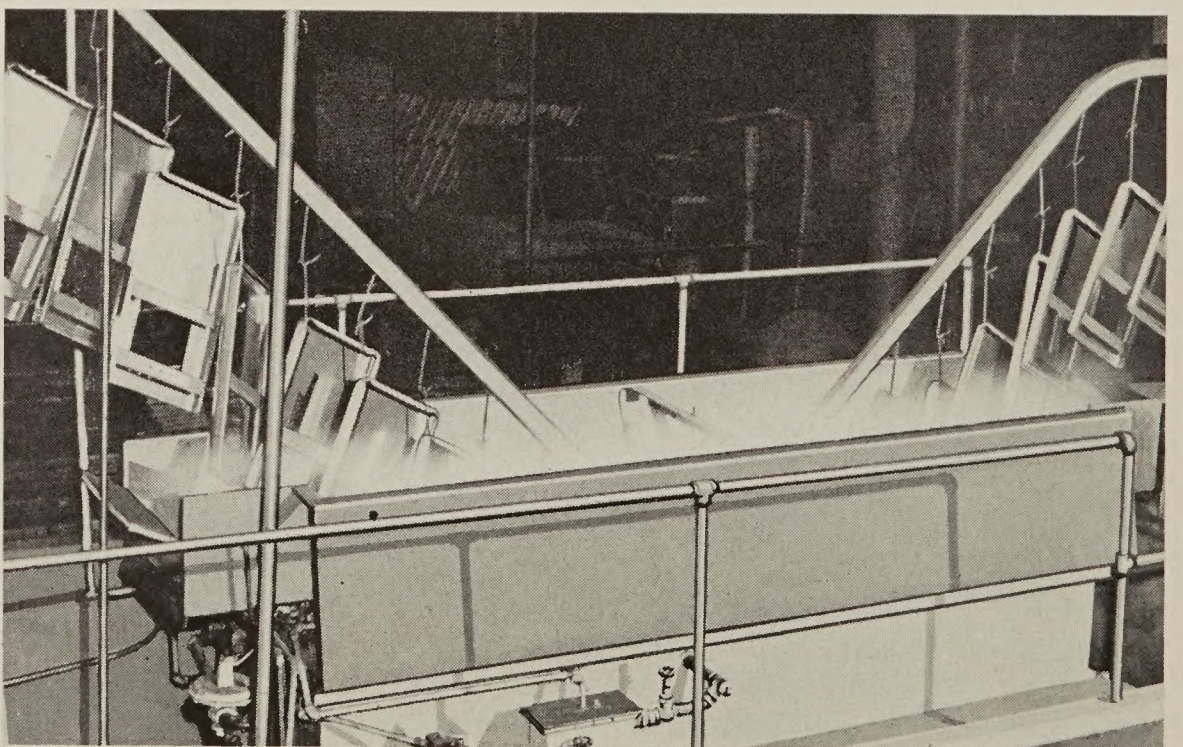
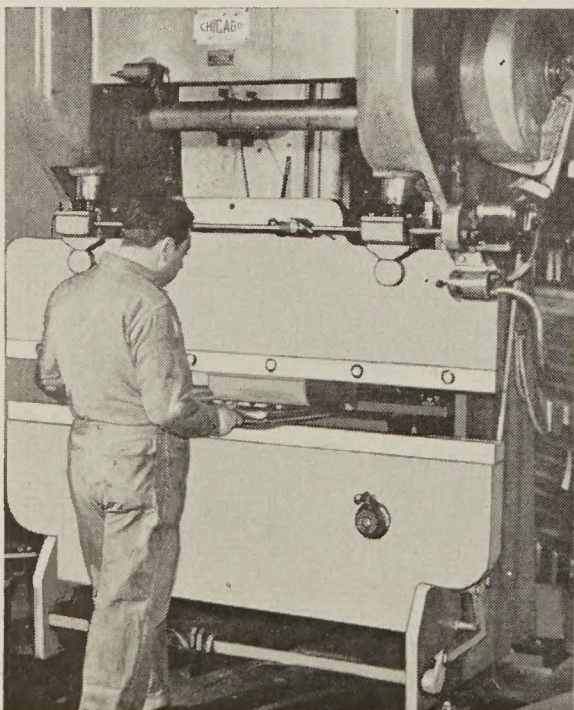


↑ POWER PRESSES. Cabinet parts are deep drawn . . . for strength and rigidity.



↑ BLANKING and Punching of heater parts with precision accuracy.

↓ POWER BRAKE. For intricate angle and radius forming.



↑ DEGREASER. Hot acid-vapor treatment cleans parts before Finishing.

THE OHIO FOUNDRY & MANUFACTURING COMPANY was established in the year 1846 . . . *over a century ago*. There was little fanfare attending the opening. Like other industries to find birth in that age, there was only the conception of an idea plus faith in American ideals. The simple ceremony consisted of a few men rolling up their sleeves and going to work with the fewest gestures.

Iron mongers and tin-smiths they were called then . . . and appurtenances for *hearthstone cookery* were their creations, for the most part. Sales were generally by barter . . . handiwork was exchanged for grain or livestock and these, in turn, traded in eastern markets for pig-iron or other trade essentials.

It must be remembered that those were stage coach days. The war with Mexico was in progress. President Polk, new in the White House, had just welcomed the states of Texas and Florida into the Union. That is the year the United States signed the agreement with Great Britain anent the *Oregon Territory* . . . when the *Wilmot Proviso* concerning slavery was passed . . . when Morton first used ether successfully as an anaesthetic . . . when our national debt amounted to less than \$16,000,000.00.

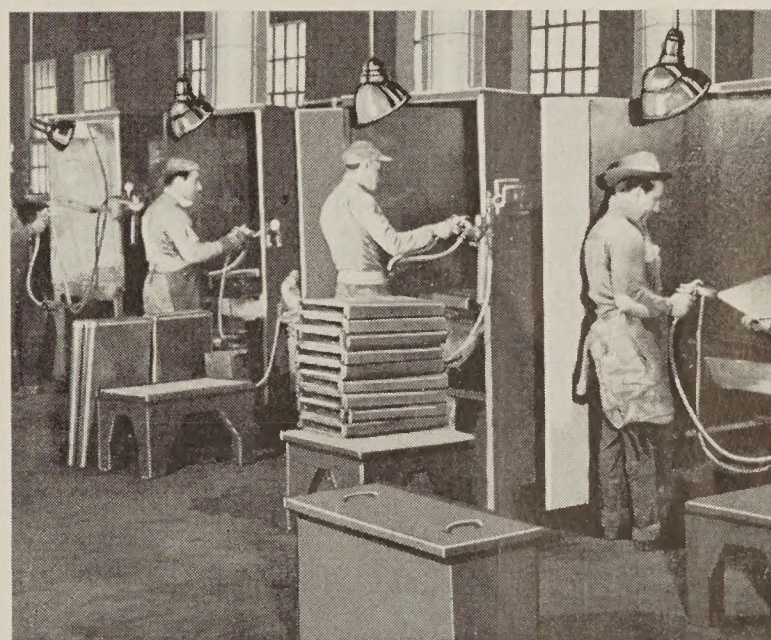
Those were days when America was being fashioned . . . when men of courage were cutting the pattern for our future mode of life. Invention and mechanization were yet to come . . . among the first being Elias Howe's initial model of the sewing machine.

It was in these primitive surroundings that OHIO FOUNDRY pioneered *Home Heating*. First came the Char Basket . . . later to be superseded by the Hob and Box Grates . . . these, in turn outmoded by countless other refinements as time elapsed. It was the early Eighties when a new fuel aroused national attention . . . *Natural Gas*. This gave new impetus to industrial progress and OHIO FOUNDRY again took leadership. The early '90's inaugurated a prolonged era of invention highlighted by the creation of the Asbestos Front, the Radiant Heater and on up to the BRILLIANT FIRE Circulator, currently developed to such marked heights in heating efficiency.

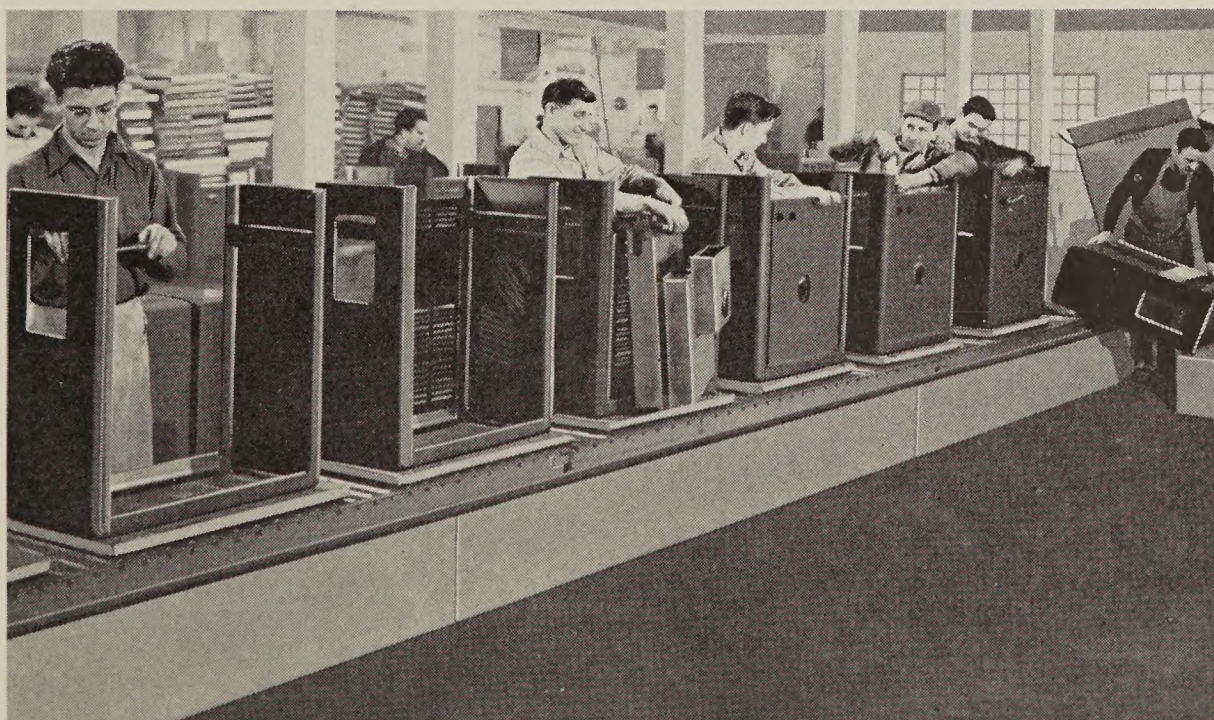
Today, as a century ago, OHIO FOUNDRY continues to maintain leadership . . . not alone in the development of new ideas but in first proving merit of its innovations. BRILLIANT FIRE reputation for Reliability and Safety has never been sacrificed to untested enthusiasm. Every BRILLIANT FIRE Heater must first undergo the rigors of thorough factory trial before being released for market exploitation. In addition, BRILLIANT FIRE Heaters are no mere "assembled" products . . . they are designed, engineered, built and tested by OHIO FOUNDRY . . . all under one roof to insure *Guaranteed Quality*.



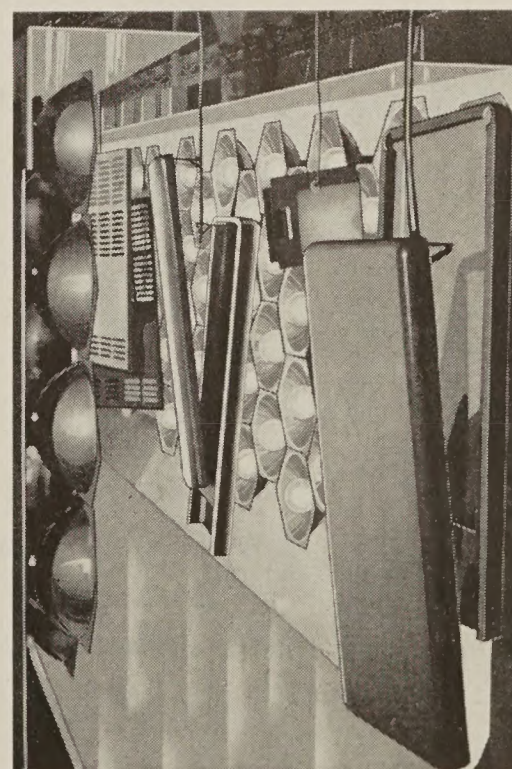
WELDING. Corner of Electric Welding Department.



FINISHING. Section of Spray Department.



↑ Typical Assembly Line.



Infra-red Baking. →

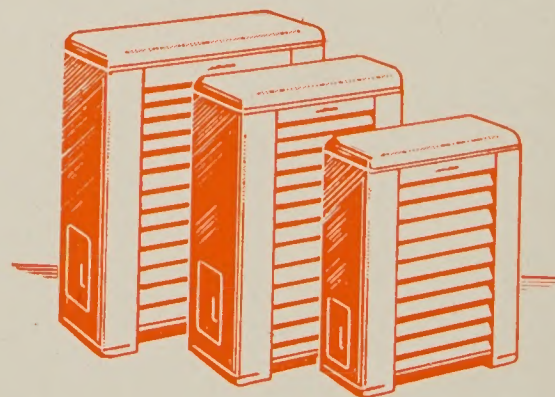


FAN-FORCED CIRCULATOR *Vented Winter Air Conditioner*



OFFERED IN THREE SIZES

This BRILLIANT FIRE model is offered in three popular sizes ranging from 30,000 Btu up to 65,000 Btu. All three are similarly engineered and offer the same high efficiency . . . differ only in Capacity. See following pages for details.



FAN-FORCED CIRCULATOR

Vented Winter Air Conditioner



FOR NATURAL • MANUFACTURED
MIXED • LP GASES



The BRILLIANT FIRE Fan-Forced Circulator is essentially a complete and compact central heating plant of the vented type. It is designed to heat single or adjoining rooms at minimum installation and operating investment. It Heats, Circulates, Filters and Humidifies in intermittent cycles as needed when equipped with thermostat.

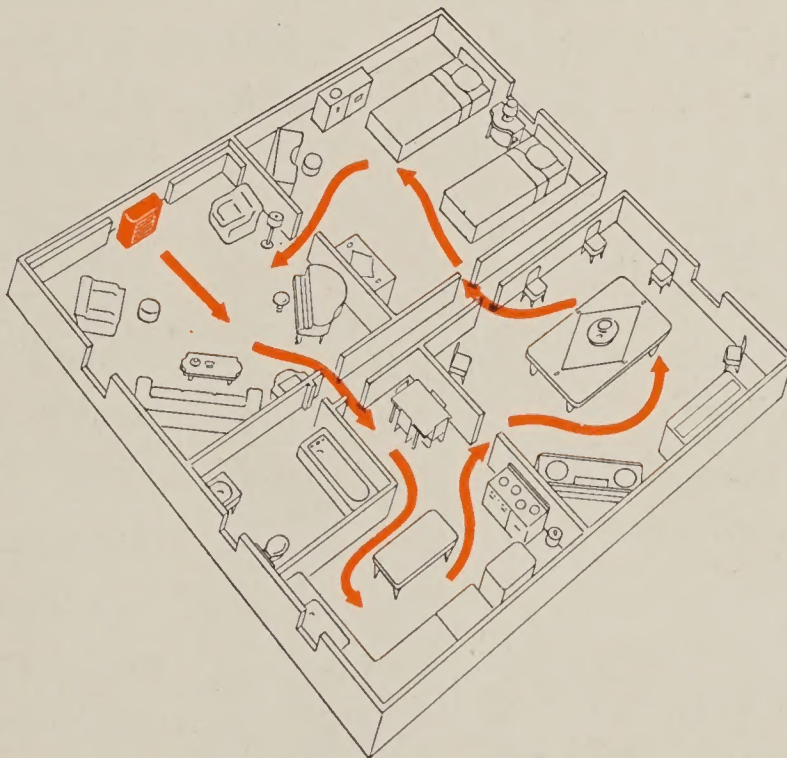
Downward heat delivery is an outstanding feature of the BRILLIANT FIRE. This means the elimination of cold floors quickly . . . avoidance of stuffiness in the living zone . . . prevention of stratification of heat at ceiling level.

Fan pressure distributes heat gently, evenly, quietly . . . leaves no cold spots. The BRILLIANT FIRE is engineered to provide maximum heat penetration which means that when model of adequate capacity has been selected, delivery of warmth-given comfort to adjacent rooms is assured.

Heating is entirely by convection. Products of combustion are confined within sealed radiator. Consequently, when properly vented to chimney or other means of exhaust, the BRILLIANT FIRE cannot cause any sweating of walls or windows. In addition, it is engineered so as to only deliver when and as radiator generates desired heat for room comfort. Thorough heat distribution to area served is accomplished through repeated cycles of re-heating and re-circulation as temperature warrants.

Summarized, the BRIL-

LIANT FIRE Fan-Forced Circulator is unquestionably the ideal space heater because it heats from the floor up (not from the ceiling down) . . . because it distributes heat thoroughly and evenly (no hot or cold spots) . . . and because it serves Economically (is the watchdog of the fuel dollar).



The BRILLIANT FIRE insures gentle, even, and thorough distribution of heat in one or a series of rooms through fan-forced delivery.

The BRILLIANT FIRE Fan-Forced Circulator is offered in three standard sizes which singly (or in multiples will adequately serve almost any heating requirement. Refer to following pages for details.

QUALITY HEATING EQUIPMENT SINCE 1846



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

FAN-FORCED CIRCULATORS

Vented Winter Air Conditioners

This compact, radio-styled Winter Air Conditioner is engineered to Heat, Circulate, Filter and Humidify. It is fully vented and when properly installed will cause no sweating . . . produce no fumes or odors. It is engineered to heat single or or adjoining rooms. It provides downward heat discharge, eliminates cold floors and precludes living zone stuffiness. Fan pressure is gauged to distribute heat gently and evenly . . . no hot blasts nor cold spots. Room air is reheated and recirculated several times hourly. Safeguards the fuel dollar.

CABINET. Rugged, rigid and well balanced. Built of heavy gauge steel, welded throughout. Styled to harmonize with most any furnishings. Finished in rich two-tone brown Feather-web (baked) . . . durable, washable and lustrous.

RADIATOR. Heavy gauge steel, welded. Sealed to confine products of combustion. Scientifically baffled to retard flow of gases for maximum heat production. Specially designed radiator tubes expose greatest heat-convection (or wiping) surface to fan action for room delivery.

BURNER. High-efficiency burner cast in one piece of heat-resistant iron . . . has machine

drilled ports (non-clog) . . . fitted with dial type air adjustor and lock.

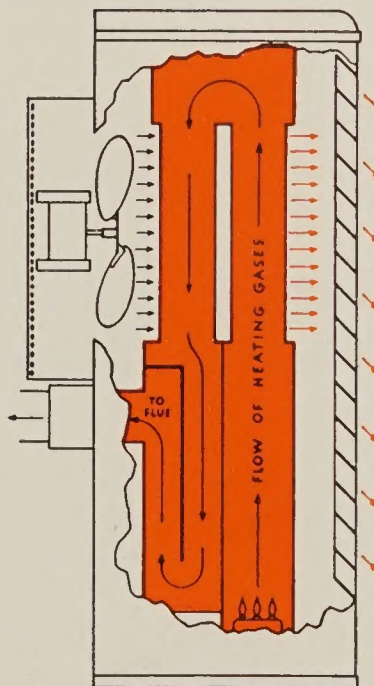
FAN UNIT. Fan is installed on rear panel with resilient mounting . . . quiet and vibrationless. Large 4-bladed fan is especially designed for effective yet gentle motivation of air. Motor is of heat-proof construction . . . 60 cycle, 115 volt A.C. Blower unit includes automatic switch which cuts in only when radiator temperature is ample for room delivery.

SUMMER SWITCH. Provision made so that Fan Unit may also be used separately for summertime cooling.

FILTER. Air Intake aperture on blower housing is fully covered with removable fine mesh wire-cloth panel to filter out dust, lint and other particles.

EQUIPMENT. Standard equipment also includes "blue flame" pilot burner, large capacity Humidifier and built-in Draft Diverter.

AUTO CONTROL. Various devices are available for converting BRILLIANT FIRE Fan-Forced Circulators to full automatic control (thermostatic valves, safety pilots, etc.). See pages 22-23 for selection.



Cross-sectional study showing Heat Flow and Directional Delivery.

QUALITY HEATING EQUIPMENT SINCE 1846

FAN-FORCED CIRCULATORS

Vented Winter Air Conditioners

Listed below are three standard sizes of Fan-Forced Circulators designed to meet most any normal heating need. All three are similarly engineered and offer the same high efficiency . . . differ only in Capacity. Can be used either singly or in multiples. (Refer to *Service Handbook* for suggestions on properly locating Circulators.)



SIZES & SPECIFICATIONS

	No. 3040	No. 4539	No. 6540
Input Rating (B.T.U. per hour)	30,000	43,500	65,000
*Output Rating (B.T.U. per hour)	24,000	34,800	52,000
**Heating Capacity (cu. ft. air space Zero to 70°)	3,429	4,971	7,428
*Equivalent Steam Radiation (sq. ft.)	100	145	217
Overall Width (inches)	27	27	33 1/4
Overall Depth (inches)	20 3/4	20 1/2	22 3/4
Overall Height (inches)	33 1/2	44	41
Height to c/1 of Flue (inches)	13	18	13 1/2
Fan Diameter (inches)	10	18	18
Motor (H.P.)	1/60	1/40	1/40
Motor (Watt Load)	40	65	90
Flue Connection (Diam. inches)	4	4	5
Gas Pipe Inlet (Diam. inches) . . (Recommended)	1/2	1/2	3/4
Packed Weight (lbs.)	130	190	210

*Based on minimum Efficiency of 80% of Input. **Average Heating Capacity (cu. ft.) in 7 Btu Zone.

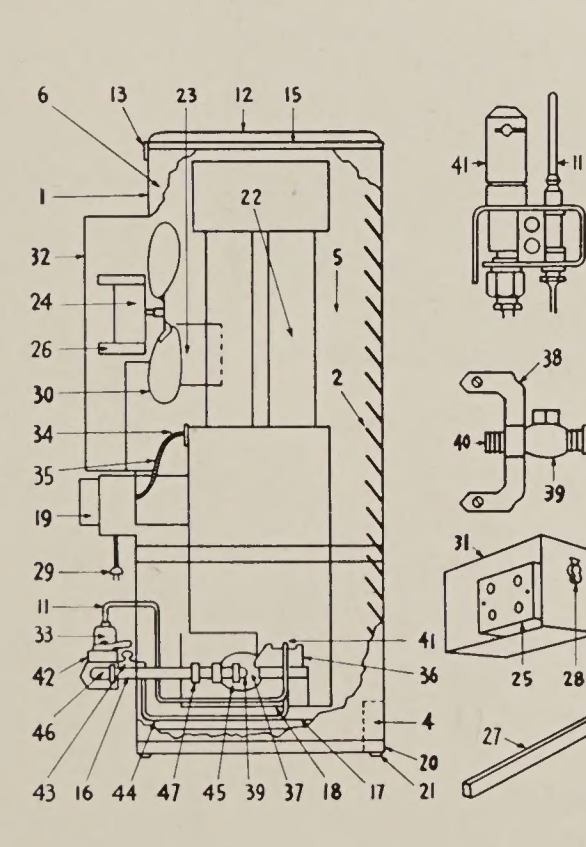
HEATING CAPACITIES shown are based on rigorous winter conditions and ordinary building construction for quick estimating purposes. For further estimating instructions, refer to Page 32 or *Service Handbook*.

FINISH: ALL BRILLIANT FIRE Fan-Forced Circulators are finished in rich two-tone brown Feather-web (baked) . . . durable, washable and lustrous.

SEE PAGES 22-23 FOR AUTOMATIC CONTROLS.

REPAIR PARTS LIST

At left is shown diagram of typical Fan-Forced Circulator with all parts numbered and below is a list identifying parts to facilitate ordering replacements. Always specify Name and Number of part as well as Model No. of Circulator when ordering.



Parts Illustrated	Model No. 3040	Model No. 4539	Model No. 6540	Parts Illustrated	Model No. 3040	Model No. 4539	Model No. 6540
Diag. No. Part Name	Part No.	Part No.	Part No.	Diag. No. Part Name	Part No.	Part No.	Part No.
1 Outside Shell Back	301	451	651	27 Motor Cork Pad	327	...	...
2 Front Louvre Panel	302	452	652	28 Motor Switch Manual	328	328	328
3 Radiator Support	303	453	653	29 Attachment Cord	329	329	329
4 Bottom Offset Panel	304	454	654	30 Fan Blade	330-35	480-18	480-18
5 Side Panel-Right	305	455	655	31 Junction Box	331	481	681
6 Side Panel-Left	306	456	656	32 Filter Screen	332	482	682
7 Side Panel Door	307	307	307	*33 Safety Pilot Valve	333	333	333
*11 Pilot Thermocouple	311	311	311	34 Fan Switch	334	334	334
12 Top Panel	312	462	662	35 Switch Lead Wire	335	485	685
13 Top Tie	313	463	663	36 Main Burner	336-491	486	686
15 Top T Mold	315	465	665	37 Air Shutter	337-1	337-1	337-1
16 Nipple	316 1/2	466 3/4	666	38 Valve Arm	337-2	337-2	337-2
17 Floor Baffle Plate	317	467	667	39 Burner Fitting	517	517	517
18 Burner Shield	318	468	668	40 Orifice (Spud)	177	177	177
19 Flue Extension	319	469	669	41 Pilot Burner	339	339	339
21 Leveling Bolt	321	321	321	42 Main Gas Cock	340	440	640
22 Radiator Complete	322	472	672	43 Pilot Gas Cock	341	341	341
23 Humidifier	323	323	323	44 Pilot Tubing	342	442	642
24 Motor	324-35	474M2	474M2	45 Close Nipple 3/8" . . . . .	...	...	643
25 Coil	325-35	475M2	675	46 Street Ell	344	444	644
26 Motor Brkt. Comp.	326	476	676	47 Reducer Fitting . . . . .	...	...	645

(*) Give Baso Model No.



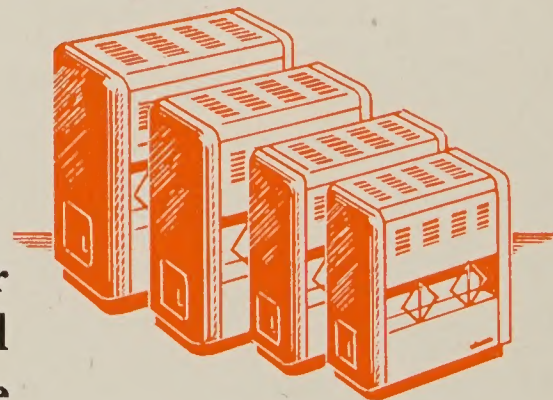
THREE-WAY CIRCULATOR

Vented Economy Heatmaker



OFFERED IN FOUR SIZES

This BRILLIANT FIRE model is offered in four sizes ranging from 16,000 Btu up to 50,000 Btu. All four are similarly engineered and offer the same high efficiency . . . differ only in Capacity. See following pages for details.



THREE-WAY CIRCULATOR

Vented Economy Heatmaker



This BRILLIANT FIRE Circulator is unique in that it is not merely a one-way heater but offers three-way heat delivery. First, it furnishes heat directly to the floor line by way of the spacious full-glow radiant front. Second, it delivers heat almost instantly into the living zone through directional louvers on the forward panel of cabinet. Third, heat by gravity is circulated through top grille into the room just as quickly as radiator warms up.

Thus, from a cold start, the Three-Way Circulator assures instantaneous response. It provides a steady flow of radiant heat to the floor immediately followed by a penetrating and comforting supply of circulated heat throughout the entire room within a matter of moments.

The Three-Way Circulator offers Beauty and Economy as well. Beauty, because it provides all the glowing charm of a radiant fireplace yet with the full economy of the modernly efficient circulator. It has neutral styling and so will harmonize with most any furnishing scheme. The finish, rich chocolate Brown with contrasting Beige center panel, is baked enamel . . . durable, lustrous, washable. The radiant front is set off by chrome wings, hearth and fully protective dress-guard. Replaceable radiants are of heavy duty type (2-in-1 style) and made of special refractory that reflects rather than absorbs heat.

The Three-Way Circulator is fully enclosed, i.e., access for lighting and making adjustments is by means of a convenient door equipped with snap-latch located on side of cabinet. Standard equipment includes built-in Draft Diverter and fixed Pilot.

Furnished with or without Automatic Controls. See Pages 22-23.

QUALITY HEATING EQUIPMENT SINCE 1846



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

THREE-WAY CIRCULATORS

Vented Economy Heatmakers

A MODERN ECONOMICAL CIRCULATOR DESIGNED TO PROVIDE HEAT INSTANTLY TO THE FLOOR LINE FOLLOWED BY A STEADY FLOW OF PENETRATING CIRCULATED HEAT TO THE LIVING ZONE.

THE BRILLIANT FIRE Three-Way Circulator is a combination of radiant and circulating principles of heating so coupled as to provide the intriguing glow of the open fireplace with the efficiency of the modernly engineered circulating heater. It is an Economy Heatmaker . . . delivering warming comfort to the floor line instantly upon lighting and subsequent heat supply to the room living zone by circulation.

CABINET. Rugged, rigid and well balanced. Built of heavy gauge steel, welded throughout. Styled to harmonize with most any furnishings. Has rich, baked enamel finish . . . Chocolate Brown with contrasting Beige center panel. Finish is durable, lustrous, washable . . . will not readily mar, chip or scratch.

RADIANTS. Expansive full-glow Radiant Front provides an ample supply of comfort-giving heat . . . beamed directly to the floor line where it is needed first. Radiants are of a special heat-reflecting refractory . . . heavy duty type. Models No. 16-TW and 20-TW are equipped with standard R-14 Radiants while Mod-

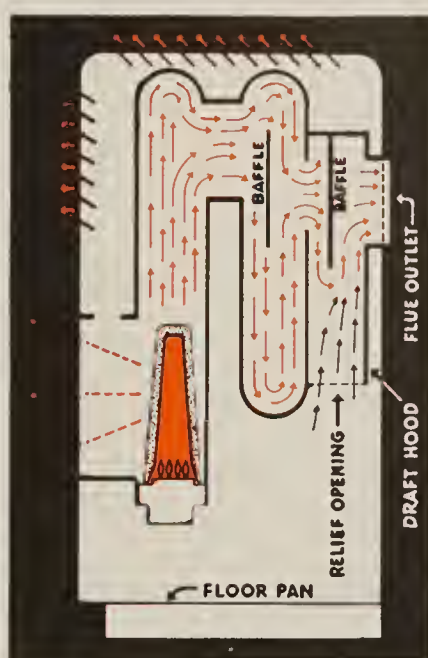
els No. 35-TW and 50-TW are equipped with R-12 Radiants. Reflector Wings, Hearth and smartly styled protective Dress Guard are chrome.

RADIATOR. Built of heavy gauge steel, welded . . . provides extended travel of gases for maximum heat extraction before venting to chimney.

BURNER. Fitted with high-efficiency burner cast in one piece of heat-resistant iron. Is machine-drilled with non-clog ports. Fitted with dial type air adjustor and lock for precision adjustment.

EQUIPMENT. This circulator is equipped with "blue flame" Pilot and built-in Draft Hood. Every combustion aid and modern safety device has been built into this appliance to provide healthful heating comfort with economy.

AUTO CONTROLS. Various devices are available for converting the Three-Way Circulator to full automatic control (thermostatic valves, safety pilots, etc.). See Pages 22-23 for details.



A cross-sectional study of cabinet interior showing combustion flow and three-way heat delivery.

QUALITY HEATING EQUIPMENT SINCE 1846

THREE-WAY CIRCULATORS

Vented Economy Circulators

Listed below are four standard sizes of Three-Way Circulators designed to meet most any normal heating need. All four are similarly engineered and offer the same high efficiency . . . differ only in Capacity. Can be used either singly or in multiples. Refer to *Service Handbook* for suggestions on properly locating Circulators.



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

SIZES & SPECIFICATIONS

	No. 16-TW	No. 20-TW	No. 35-TW	No. 50-TW
Input Rating (B.T.U. per hour)	16,000	20,000	35,000	50,000
*Output Rating (B.T.U. per hour)	11,200	14,000	24,500	35,000
**Heating Capacity (cu. ft. air space Zero to 70°)	1,600	2,000	3,500	5,000
*Equivalent Steam Radiation (sq. ft.)	46.6	58.3	102	146
Overall Width (inches)	21 1/2	22 5/8	25 3/4	31 3/8
Overall Depth (inches)	10	10	14	14
Overall Height (inches)	25 1/4	27 7/8	29 1/8	35
Height to c/1 of Flue (inches)	17 1/2	20 5/8	21 9/16	26 7/8
Flue Connection (Diam. inches)	3	4	4	4
Gas Pipe Inlet (Diam. inches)	3/8	3/8	1/2	1/2
Number of Radiants (2-in-1)	4	5	6†	7†
Packed Weight (lbs.)	44	60	89	120

*Based on minimum efficiency of 70% of Input. **Average Heating Capacity (cu. ft.) in 7 Btu zone. †Heavy duty Circulator Radiants.

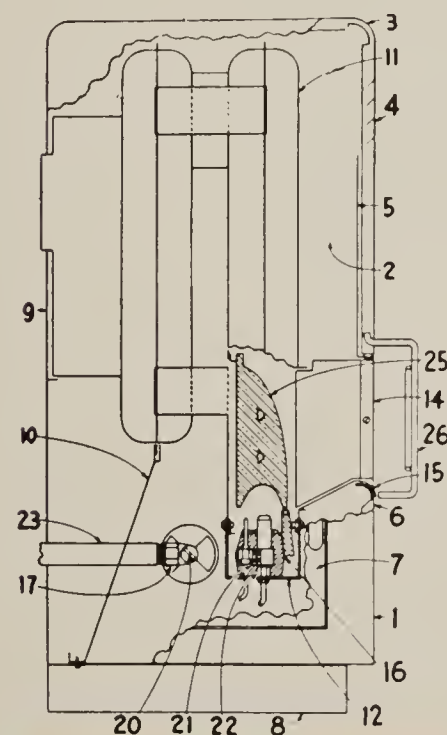
HEATING CAPACITY. Shown above are figures based on rigorous winter conditions and ordinary building construction for quick estimating purposes. Refer to Page 32 or *Service Handbook* for further details.

FINISH. ALL BRILLIANT FIRE Three-Way Circulators have two-tone (baked enamel) . . . rich Chocolate Brown with contrasting Beige center panel . . . durable, lustrous, washable.

SEE PAGES 22-23 FOR AUTOMATIC CONTROLS

REPAIR PARTS LIST

At left is shown diagram of typical Three-Way Circulator with all parts numbered and below is a list of identifying parts to facilitate ordering replacements. Always specify Name and Number of part as well as Model No. of Circulator when ordering.



Diag. No.	Part Name	No. Req'd	Part Number			
			16-TW	20-TW	35-TW	50-TW
1	Side Panel, left	1	735	680	535	635
2	Side Panel, right	1	736	681	536	636
3	Top Panel	1	704	654	504	604
4	Front Panel	1	705	655	505	605
5	Front Panel Shield	1	706	656	506	606
6	Bottom Panel	1	707	657	507	607
7	Cabinet Door	1	737	682	537	637
8	Base Assembly	1	738	683	538	638
9	Cabinet Back	1	712	662	539	639
10	Draft Deflector	1	...	...	541	641
11	Heating Section	1	739	684	540	640
12	Burner Brackets	2	723	673	522	622
13	Reflector, left**	1	727	677	526	625
14	Reflector, right	1	728	678	527	626
15	Hearth Plate	1	726	676	525	624
16	Burner	1	115	492	444A	461A
17	Burner Fitting, City	1	...	...	491	491
18	Burner Fitting, LP**	1	...	...	899-9 Valve	899-9 Valve
19	Shut-off Valve**	1	188F-18	161F-720	191-59X	191-59X
20	Burner Orifice*	1	178	177	177	177
21	Pilot Burner	1	2D12-10	2D12-10	2D12-10	2D12-10
22	Pilot Orifice*	1	22-F	22-F	22-F	22-F
23	Manifold	1	Assembly	Assembly	Assembly	Assembly
24	Emblem**	1	8418	8418	8418	8418
25	Radiants	x	4-R-14	5-R-14	6-R-12	7-R-12
26	Dress Guard	1	745	695	545	645

Notes: (*) Give kind of gas, also Btu and Specific Gravity.
(**) Not illustrated. (x) See each heater.

QUALITY HEATING EQUIPMENT SINCE 1846

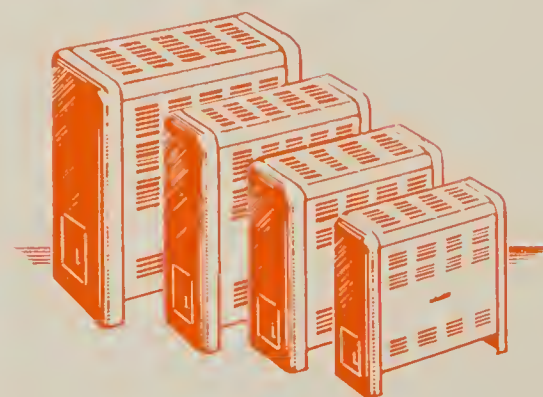


LOWBOY CIRCULATOR *Fully Enclosed Heatmaker*



OFFERED IN FOUR SIZES

This BRILLIANT FIRE model is offered in four sizes ranging from 20,000 Btu up to 65,000 Btu. All four are similarly engineered and offer the same high efficiency . . . differ only in Capacity. See following pages for details.



LOWBOY CIRCULATOR

Fully Enclosed Heatmaker



HERE is a console type of Vented Circulator that challenges any comparison of operating efficiency and effectiveness per dollar invested. The LOWBOY is low, compact and fully enclosed. Cabinet is designed to provide ample protection for baby hands on all sides. Probing fingers cannot penetrate fire chamber with sticks or other missiles. Radiator is inset, sealed and air insulated.

When the LOWBOY is properly vented to chimney or other exhaust outlet, there is no possible chance of walls or windows sweating during operation. Heat is extracted entirely by convection. Hot combustion gases are sealed within spacious radiator. Unique radiator design provides extended travel for gases so that maximum heat may be extracted from fuel before residue is vented to flue. Thus, *Economy* is a prime feature of this compact heatmaker as well as *Safety*.

Real *Quality* is built into the LOWBOY, too. Heavy gauge steel is used throughout to make assembly sturdy, lasting, chatterproof. Parts are die-formed to exacting precision and then welded to make them durable and leakproof. Burner is of heat-resistant iron and ports are drilled to prevent clogging. Fittings and controls are of the highest quality. Pilot is installed to insure permanent alignment. Draft Diverter is built in as an integral part of unit to provide constant protection against adverse weather conditions. Access Door for lighting and making adjustments is conveniently located and fitted with snap latch for security. Directional Louvers are permanently and accurately pitched to insure most effective heat delivery. Cabinets are richly and durably finished by infra-red baking. These are but a few features illustrating the inbuilt *Quality* of the LOWBOY Circulator.

Offered in four practical sizes, the LOWBOY is equally popular for home, office, store or shop installation.

QUALITY HEATING EQUIPMENT SINCE 1846



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

LOWBOY CIRCULATORS

Fully Enclosed Heatmakers

A SAFE, COMPACT, CONSOLE TYPE OF HEATER, STYLED AND ENGINEERED FOR MOST ANY HEATING JOB. DESIGNED FOR QUICK RESPONSE AND THOROUGH HEAT DISTRIBUTION WITHOUT SWEATING.

THE LOWBOY Circulator is styled low and compact for ready adaptability to any surroundings that may be encountered. Designed for the home, it is equally suited for installation in office, church, lodge hall, store or shop. It is offered in a full range of standard sizes. Can be installed singly or in multiples . . . for one or a series of rooms . . . or as auxiliary units in Fan-forced installations.

SAFETY. This is a keynote of the LOWBOY Circulator. It is fully enclosed and adequate space (air insulation) between cabinet and radiator precludes possibility of probing hands penetrating fire-chamber with sticks or other missiles. Lighting, adjustments and pilot control are all safely housed within cabinet. Access within is by means of convenient side panel door equipped with safety snap-latch.

CABINET. Fashioned low, the cabinet not only conserves room space but offers broad installation possibilities. Of heavy gauge steel construction, it is rigid, sturdy and well-balanced. Finish is baked on by infrared process . . . durable, washable.

RADIATOR. Scientifically engineered, radiator seg-

ments are die-formed to precision accuracy, then sealed by welding to prevent any escape of combustion odors into the room atmosphere. Heating is entirely by convection. Extended travel of gases within radiator makes possible the maximum extraction of heat from fuel burned before residue is vented to chimney.

BURNER. Of high-efficiency type, burner is cast in one piece of heat-resistant iron. It is machine-drilled with non-clog ports. Fitted with dial type air adjustor with lock for precision adjustment.

EQUIPMENT. Included as standard equipment in the LOWBOY Circulator are the "blue flame" pilot burner and a built-in Draft Diverter. This appliance has been designed to provide every combustion aid and modern device available for complete and healthful heating comfort with fullest operating economy.

AUTO CONTROLS. Various devices are available for converting the LOWBOY Circulator to full automatic control (thermostatic valves, safety pilots, etc.). See Pages 22-23 for details.



A cross-sectional study of cabinet interior to show combustion flow and outward, upward heat delivery.

QUALITY HEATING EQUIPMENT SINCE 1846

LOWBOY CIRCULATORS

Fully Enclosed Heatmakers

Listed below are four standard sizes of Lowboy Circulators designed to meet most any normal heating need. All four are similarly engineered and offer the same high efficiency . . . differ only in Capacity. Can be used either singly or in multiples. Refer to *Service Handbook* for suggestions on properly locating Circulators.



SIZES & SPECIFICATIONS

	No. 20-LO	No. 30-LO	No. 50-LO	No. 65-LO
Input Rating (B.T.U. per hour)	20,000	30,000	50,000	65,000
*Output Rating (B.T.U. per hour)	14,000	21,000	35,000	45,500
**Heating Capacity (cu. ft. air space Zero to 70°)	2,000	3,000	5,000	6,500
*Equivalent Steam Radiation (sq. ft.)	58.3	87.5	146	189.5
Overall Width (inches)	22 5/8	25 3/4	31 3/8	31 3/8
Overall Depth (inches)	10	14	14	21 1/4
Overall Height (inches)	25 3/4	27	32 7/8	39 1/8
Height to c/1 of Flue (inches)	18 1/2	19 7/16	24 3/4	30 3/16
Flue Connection (Diam. inches)	3	4	4	5
Gas Pipe Inlet (Diam. inches)	3/8	1/2	1/2	3/4
Packed Weight (lbs.)	57	79	106	167

*Based on minimum efficiency of 70% of Input. **Average Heating Capacity (cu. ft.) in 7 B.T.U. zone.

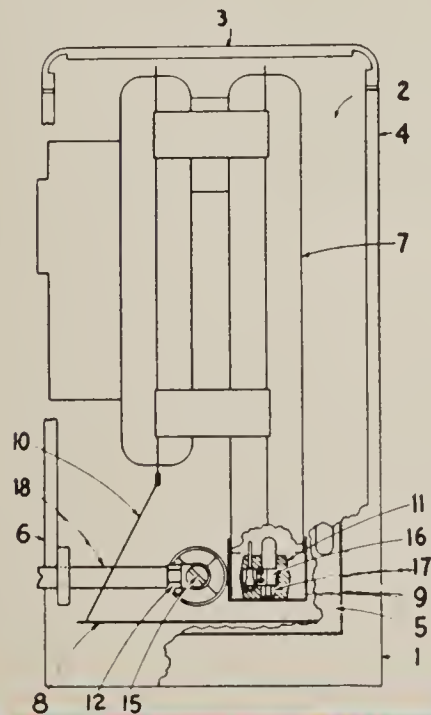
HEATING CAPACITY. Shown above are figures based on rigorous winter conditions and ordinary building construction for quick estimating purposes. Refer to Page 32 or *Service Handbook* for further details.

FINISH. ALL BRILLIANT FIRE Lowboy Circulators finished in rich Brown enamel (baked) . . . durable, washable.

SEE PAGES 22-23 FOR AUTOMATIC CONTROLS

REPAIR PARTS LIST

At left is shown diagram of typical Lowboy Circulator with all parts numbered and below is a list of identifying parts to facilitate ordering replacements. Always specify Name and Number of part as well as Model No. of Circulator when ordering.



Diag. No.	Part Name	No. Req'd	Part Number			
			20-LO	30-LO	50-LO	65-LO
1	Side Panel, left	1	580	475	425	380
2	Side Panel, right	1	581	476	426	381
3	Top Panel	1	554	453	403	382
4	Front Panel	1	582	477	427	383
5	Cabinet Door	1	583	478	428	384
6	Back Panel	1	559	479	429	385
7	Heating Section	1	584	480	430	386
8	Floor Pan	1	585	468	420	387
9	Burner Bracket	2	570	469	421	376
10	Draft Deflector	1	...	481	431	...
11	Burner	1	492	444A	461A	490A
12	Burner Fitting, City	1	...	491	491	491
13	Burner Fitting, LP**	1	...	819	819	819
14	Shut-off Valve**	1	161F-720	191-59X	191-59X	191-59X Nat'l Gas 591-65 Mfgd. Gas
15	Burner Orifice*	1	177	177	177	177
16	Pilot Burner	1	2D12-10	2D12-10	2D12-10	2D12-10
17	Pilot Orifice*	1	22-F	22-F	22-F	22-F
18	Manifold	1	Assembly	Assembly	Assembly	Assembly
19	Emblem**	1	8418	8418	8418	8418

Notes: (*) Give kind of gas, also Btu and specific gravity. (**) Not illustrated.

QUALITY HEATING EQUIPMENT SINCE 1846



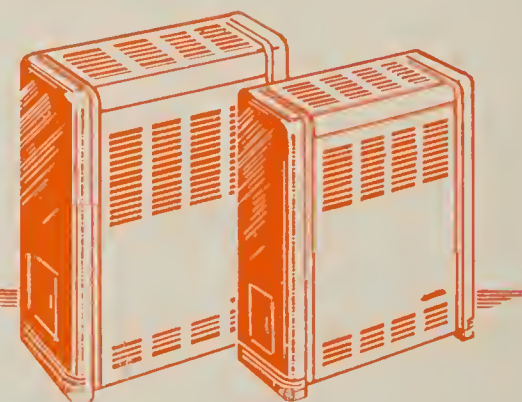
THE LOWBOY DELUXE

A Forced Air Circulator



OFFERED IN TWO SIZES

This BRILLIANT FIRE model is offered in two sizes . . . 30,000 Btu and 50,000 Btu. Both are similarly engineered and offer the same high efficiency . . . differ only in Capacity. See following pages for details.

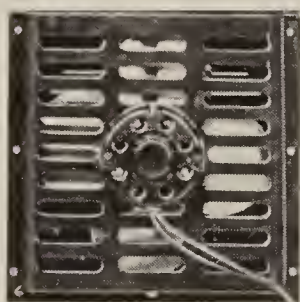


THE LOWBOY DELUXE

A Forced Air Circulator



FOR NATURAL • MANUFACTURED
MIXED • LP GASES



The sensational LOWBOY DELUXE is the newest in the BRILLIANT FIRE family of high quality Vented Circulators. It offers efficiency, dependability, convenience, safety and operating economy . . . yet, has matchless beauty and is budget priced.

The features introduced in the new LOWBOY DELUXE Circulator are distinctive and many. First, it provides Forced-Air heat delivery and is equipped with Automatic Fan Control. Noteworthy, too, is the unique Convection Tunnel . . . spacious and finned throughout so as to achieve maximum utilization of the heat supply. Heat, fan-delivered from this Convection Tunnel, means more thorough and more rapid distribution into the room. To aid further in achieving the most effective heat distribution, Panel Louvers are permanently fixed . . . vanes are accurately pitched to provide maximum comfort from heat flow.

The LOWBOY DELUXE also offers countless other quality features. Fully enclosed cabinet is tamperproof . . . operating access for lighting and making adjustments is by means of side panel door equipped with spring latch. Heavy gauge steel and welded construction make this unit thoroughly chatterproof. Scientifically engineered radiator provides extended travel of hot gases . . . extracts maximum heat from fuel consumed. Radiator is sealed . . . prevents sweating of walls or windows, escape of odors. Pilot is rigidly mounted to insure positive ignition. Suitable Draft Diverter is built into unit as protection against adverse weather conditions. Burner is of high-efficiency type . . . ports are drilled to prevent clogging.

The LOWBOY DELUXE is ideal for home, office, club, store or shop. Easy to install, regulate . . . and thriftwise on fuel. Suitable for one or a series of rooms. Full Automatic Control optional.

Offered in two sizes . . . both have Chrome-Art finish.

QUALITY HEATING EQUIPMENT SINCE 1846



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

THE LOWBOY DELUXE

A Forced Air Circulator

HERE, indeed, is a quality-plus heat-maker. It not only provides an abundant supply of clean, healthful heat but, through forced-air delivery, distributes heat quickly and effectively throughout one or a series of adjoining rooms. Balanced styling and finish make the LOWBOY DELUXE equally adaptable in home, office, club, church, store or shop.

CABINET. Built of heavy gauge steel, cabinet is sturdy, well-balanced and chatterproof. Of streamline design, it is fully enclosed . . . access for lighting and making adjustments is through convenient side panel door equipped with snap-latch. The Chrome-Art finish is durable and washable . . . a baked finish that will not readily mar, chip or scratch.

RADIATOR. Scientifically engineered, radiator segments are die-formed to precision accuracy, then sealed by welding. This means no sweating of walls or windows . . . no escape of combustion odors into the room atmosphere. Heating is entirely by convection. Extended travel of gases within radiator makes possible the maximum extraction of heat from fuel burned before residue is vented to chimney.

BURNER. Of high-efficiency type, burner is cast in one piece of heat-resistant iron. Embossed ports are machine drilled . . . will not clog. Fitted with precision air adjustor

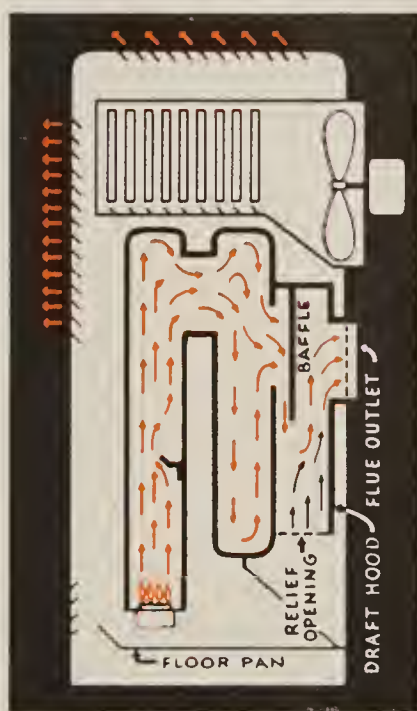
and lock to maintain fixed setting.

FAN. Entire unit is compactly housed on rear panel at entrance to Convection Tunnel. Fan is of 4-blade design . . . fully protected by over-all steel guard. Motor (60 cycle, 115 volt A.C.) is of heatproof construction . . . has resilient mounting. This unit provides gentle yet effective motivation of air and is quiet, vibrationless. Is equipped with thermostatic switch to cut in only when radiator temperature is ample for room delivery.

CONVECTION TUNNEL. A unique development to better utilize heat generated. Essentially a centralizing chamber from which heat supply is most effectively distributed into the room by fan action. Finned construction of Tunnel accelerates delivery of heat . . . prevents waste.

EQUIPMENT. Included as standard equipment are the blue flame Pilot and built in Draft Diverter. This appliance has been designed to provide every combustion aid and modern device available to give complete and healthful heating comfort with fullest operating economy.

AUTO CONTROLS. Various devices are available for converting the Lowboy Deluxe to full automatic control (thermostatic valves, safety pilots, etc.). See Pages 22-23 for details.



A cross-sectional study of cabinet interior showing combustion flow and heat delivery.

QUALITY HEATING EQUIPMENT SINCE 1846

THE LOWBOY DELUXE

A Forced Air Circulator

Listed below are two standard sizes of Lowboy Deluxe Circulators designed to meet the most popular heating needs. Both are similarly engineered and offer the same high efficiency . . . differ only in Capacity. Can be used either singly or in multiples. Refer to *Service Handbook* for suggestions on properly locating Circulators.



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

SIZES & SPECIFICATIONS

	No. 30-FA	No. 50-FA
Input Rating (Btu per hour)	30,000	50,000
*Output Rating (Btu per hour)	21,000	35,000
**Heating Capacity (cu. ft. air space Zero to 70°)	3,000	5,000
*Equivalent Steam Radiation (sq. ft.)	87.5	146
Overall Width (inches)	26	31 1/4
Overall Depth (inches)	18	22
Overall Height (inches)	32 7/8	39 1/8
Height to c/l of Flue (inches)	18 1/4	21 7/8
Flue Connection (Diam. inches)	4	4
Gas Pipe Inlet (Diam. inches)	1/2	1/2
Packed Weight (lbs.)	90	120

*Based on Minimum Efficiency of 70% Input. **Average Heating Capacity in 7 Btu. Zone.

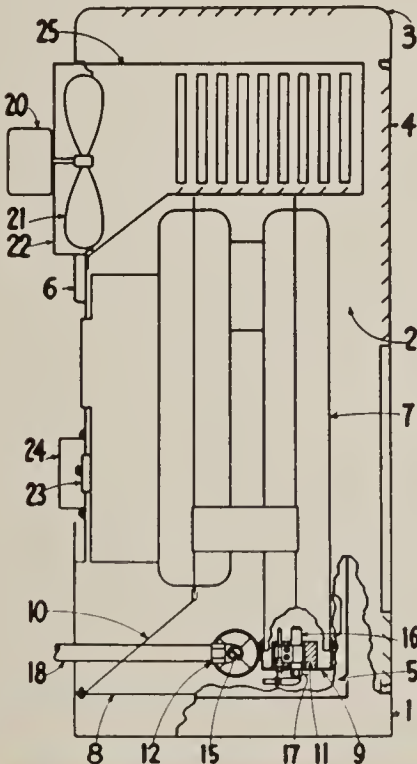
HEATING CAPACITY. Shown above are figures based on rigorous winter conditions and ordinary building construction for quick estimating purposes. Refer to Page 32 or *Service Handbook* for further details.

FINISH. Lowboy Deluxe Circulators are beautifully finished in rich Brown *Feathertone* (baked enamel), trimmed in chrome . . . lustrous, durable, washable.

SEE PAGES 22-23 FOR AUTOMATIC CONTROLS

REPAIR PARTS LIST

At left is shown diagram of typical Lowboy Deluxe Circulator with all parts numbered and below is a list of identifying parts to facilitate ordering replacements. Always specify Name and Number of part as well as Model No. of Circulator when ordering.



Diag. No.	Part Name	No. Req'd.	Part Number	
			No. 30-FA	No. 50-FA
1	Side Panel, L.	1	931	981
2	Side Panel, R.	1	932	982
3	Top Panel	1	933	983
4	Front Panel	1	934	984
5	Cabinet Door	1	935	985
6	Cabinet Back	1	910	960
7	Heating Section	1	936	986
8	Floor Pan	1	923	973
9	Burner Bracket	2	928	978
10	Draft Deflector	1	938	988
11	Main Burner	1	444-A	461-A
12	Burner Fitting, City	1	491	491
13	Burner Fitting, LP**	1	819	819
14	Shut-off Valve**	1	191-59X	191-59X
15	Burner Orifice*	1	177	177
16	Pilot Burner	1	2D12-10	2D12-10
17	Pilot Orifice*	1	5	5
18	Manifold	1	Assembly	Assembly
19	B-F Emblem**	1	8418	8418
20	Fan Motor	1	L-59	L-59
21	Fan	1	O-532-5	1027
22	Fan Guard	1	912	962
23	Fan Switch	1	MC-22	MC-22
24	Junction Box	1	911	961
25	Convection Tunnel	1	937	987
26	Exten. Cord**	1	950	950

*Give kind of gas, also Btu and specific gravity. **Not illustrated.



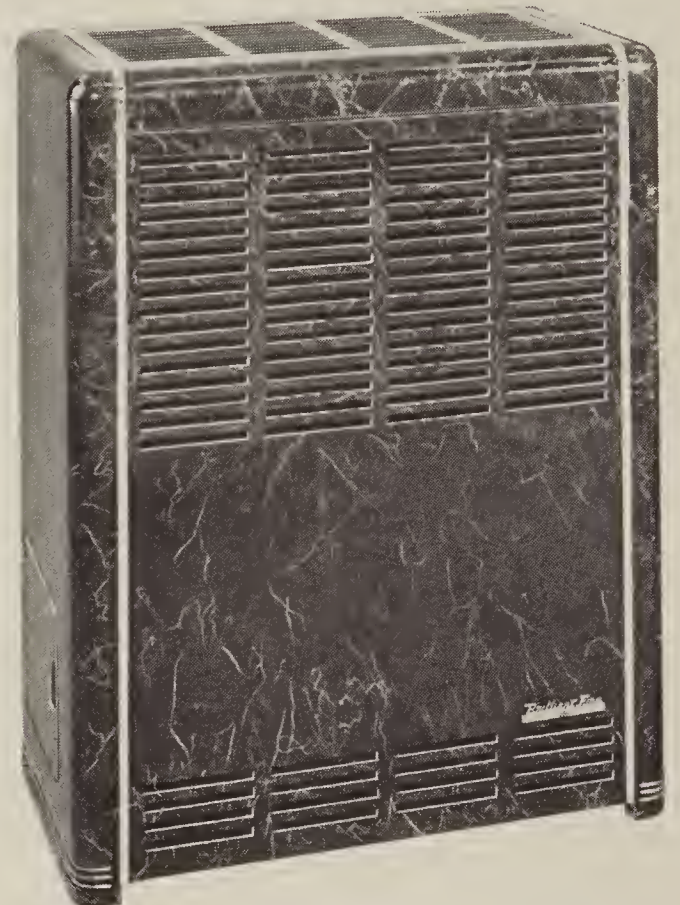
FOR NATURAL • MANUFACTURED
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THE LOWBOY DELUXE (x) *Without Fan Unit*

Similar in every detail to the Forced Air models listed on preceding page except that Fan Unit has been omitted. Included, however, are such features as the finned Convection Tunnel, sealed Radiator, fixed Pilot, built-in Draft Diverter, Chrome-Art finish and other refinements.

This model likewise has broad application . . . in home, church, lodge, office, store or shop. Suitable for one or a series of rooms. Full Automatic Controls optional.

Offered in two popular sizes.



SIZES & SPECIFICATIONS

	No. 30-FA (x)	No. 50-FA (x)
Input Rating (Btu per hour)	30,000	50,000
*Output Rating (Btu per hour)	21,000	35,000
**Heating Capacity (cu. ft. air space Zero to 70°)	3,000	5,000
*Equivalent Steam Radiation (sq. ft.)	87.5	146
Overall Width (inches)	26	31 1/4
Overall Depth (inches)	18	22
Overall Height (inches)	32 7/8	39 1/8
Height to c/l of Flue (inches)	18 1/4	21 7/8
Flue Connection (Diam. inches)	4	4
Gas Pipe Inlet (Diam. inches)	1/2	1/2
Packed Weight (lbs.)	90	120

*Based on Minimum Efficiency of 70% of Input. **Average Heating Capacity in 7 Btu. Zone.

x No Fan Unit

HEATING CAPACITY. Shown above are figures based on rigorous winter conditions and ordinary building construction for quick estimating purposes. Refer to Page 32 or *Service Handbook* for further details.

FINISH. Lowboy Deluxe Circulators are beautifully finished in rich Brown *Feathertone* (baked enamel), trimmed in chrome . . . lustrous, durable, washable.

SEE PAGES 22-23 FOR AUTOMATIC CONTROLS

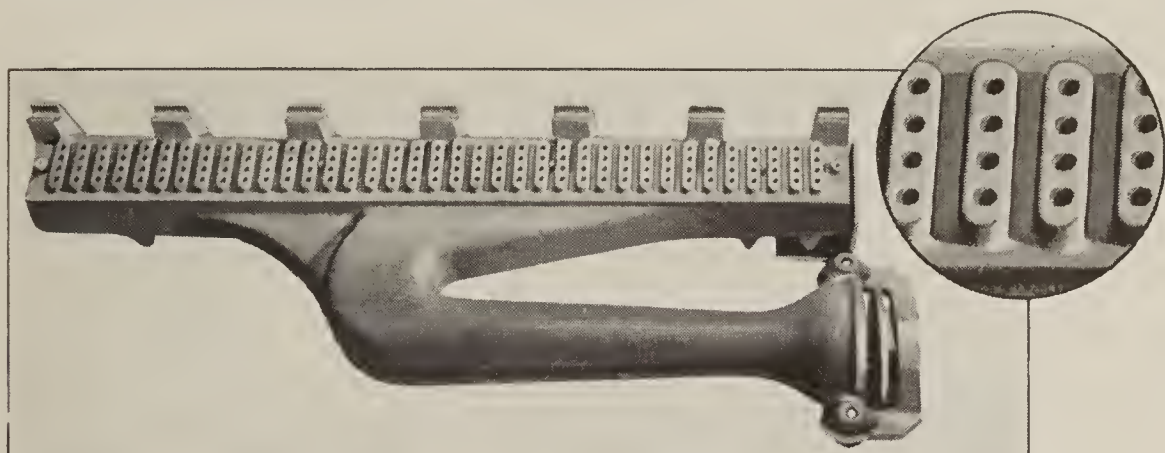
QUALITY HEATING EQUIPMENT SINCE 1816

BRILLIANT FIRE CHASSIS

Construction Features



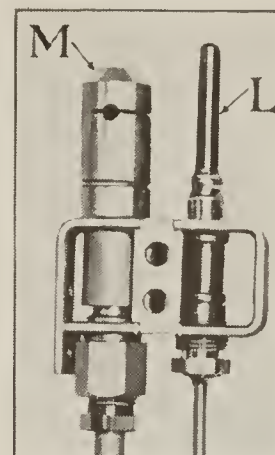
FOR NATURAL • MANUFACTURED
MIXED • LP GASES



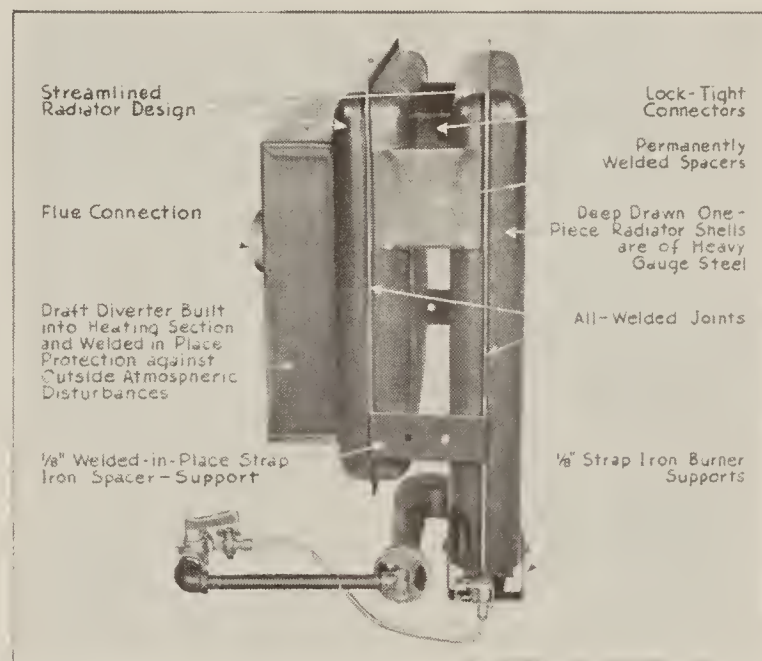
CIRCULATOR BURNER. One piece casting of heat-resistant grey iron. Note embossed burner ports, precision drilled . . . non-clog.

PEAK EFFICIENCY being paramount, the **BRILLIANT FIRE** Burner is rated as outstanding in the industry for scientific achievement. It is designed to give Safe, Silent, Odorless Operation . . . maximum Heat Production at lowest fuel consumption.

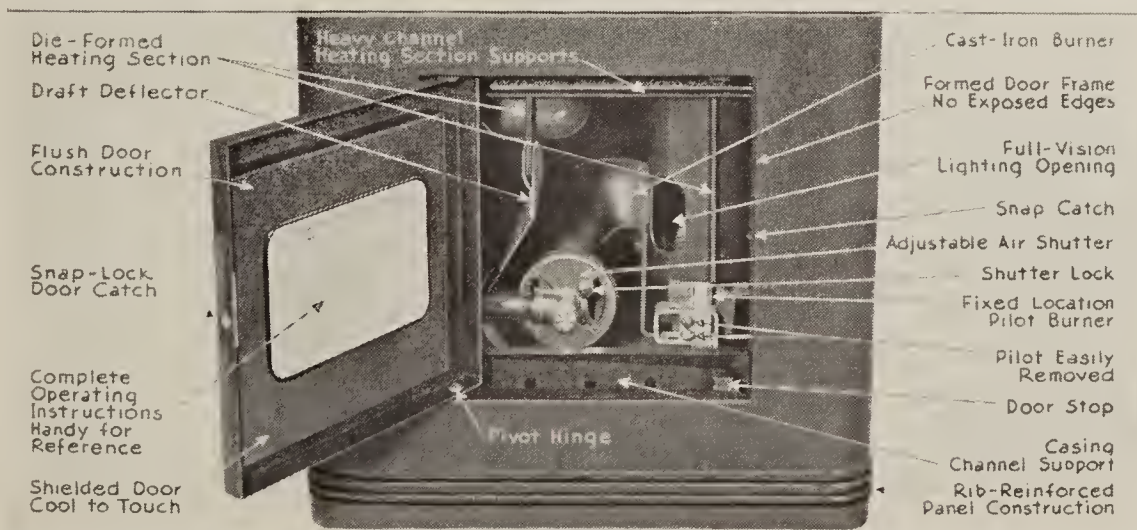
In the **BRILLIANT FIRE** Burner, three features are noteworthy. (1) Spacious burner tube, exactly proportioned to insure even flow of gas to every port without restriction. (2) Embossed Burner Ports are machine-drilled to provide perfect combustion and uniform flame over entire burner surface. (3) Graduated throat plus precision Air Shutter assures proper mixture for economical, comfort-giving heat production.



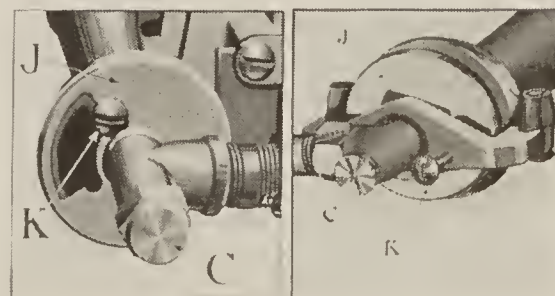
PILOT. Rigid mounting to insure dependable ignition. Shown here with Thermocouple included.



Typical Radiator Unit designating modern construction features.



ACCESS DOOR. Convenient for lighting or making adjustments . . . a protection against dust and probing fingers.



MIXERS. Both styles offer precision adjustment . . . Orifice (C), Air Shutter (J), Shutter Lock (K).

QUALITY HEATING EQUIPMENT SINCE 1846



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

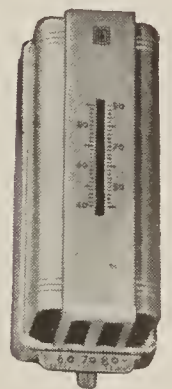
AUTOMATIC CONTROLS

Separate Devices

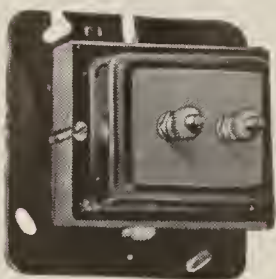
REMOTE CONTROLS



"TIME-O-STAT"



"ACRATHERM"



TRANSFORMER



SOLENOID VALVE

SHOWN HERE ARE INDIVIDUAL AUTOMATIC CONTROL DEVICES SUITABLE FOR USE WITH ANY BRILLIANT FIRE VENTED CIRCULATOR. WHEN ORDERING SEPARATELY, ALWAYS STATE MODEL AND SERIES NUMBER OF CIRCULATOR AND SYMBOL OF DEVICE DESIRED.

SAFETY PILOT (Z). This *Baso* Valve provides 100% shutoff in case of gas failure or pilot outage. Only admits gas when Thermocouple is properly heated. Main gas shutoff is built into valve. Comes complete with Thermocouple.

THERMOSTAT (RE). This *Robertshaw* Valve ($\frac{1}{2}$ " or $\frac{3}{4}$ ") installs in gas line. Provides full volume gas flow to burner till desired temperature is reached, then cuts to minimum flow . . . is Throttling Type. Opens wide again when setting calls for heat. *Not for LP-Gas.* ($\frac{3}{4}$ " for Manufactured Gas.)

THERMOSTAT (RES). This *Robertshaw* Valve ($\frac{1}{2}$ " or $\frac{3}{4}$ ") installs in gas line. Provides full volume gas flow to burner till desired temperature is reached, then shuts off entirely. Opens again when setting calls for heat. Use *only* with Safety Pilot. *Suitable for LP-Gas.* ($\frac{3}{4}$ " for Manufactured Gas.)

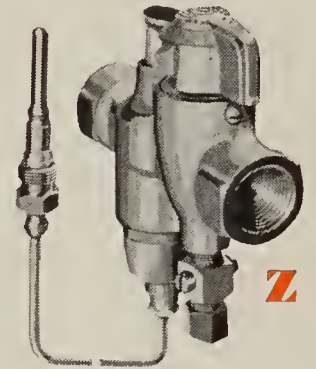
PRESSURE REGULATOR (P). Prevents fluctuation in gas pressure and insures efficient Circulator operation. Once set, requires no further adjustment. Installs in gas line. Is set at 4" W.C. (Correct Orifice size must be used.)

REMOTE CONTROLS

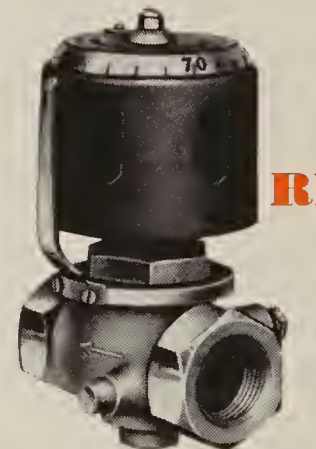
H. This is *Minn-Honeywell* No. Y-77C Package. Snap-acting, employs heat-leveling *Acratherm*, extremely sensitive for close control.

M. This is *Minn-Honeywell* No. Y-78C Package. Employs *Time-o-Stat* for automatic step-up of heat at desired morning hour and has safety cut-in for overnight temperature drop.

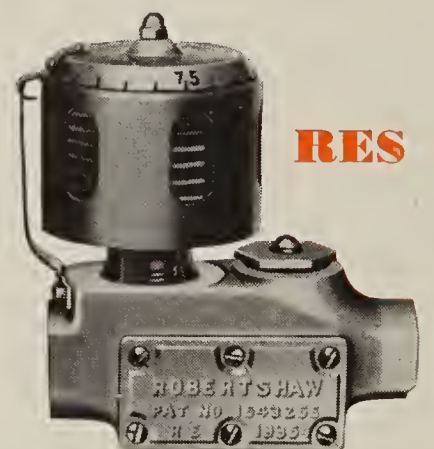
Both packages also include 24 volt Transformer, Solenoid Valve, necessary wire and fittings for complete installation.



SAFETY PILOT VALVE



THERMOSTATIC VALVE



THERMOSTATIC VALVE



PRESSURE REGULATOR

QUALITY HEATING EQUIPMENT SINCE 1846

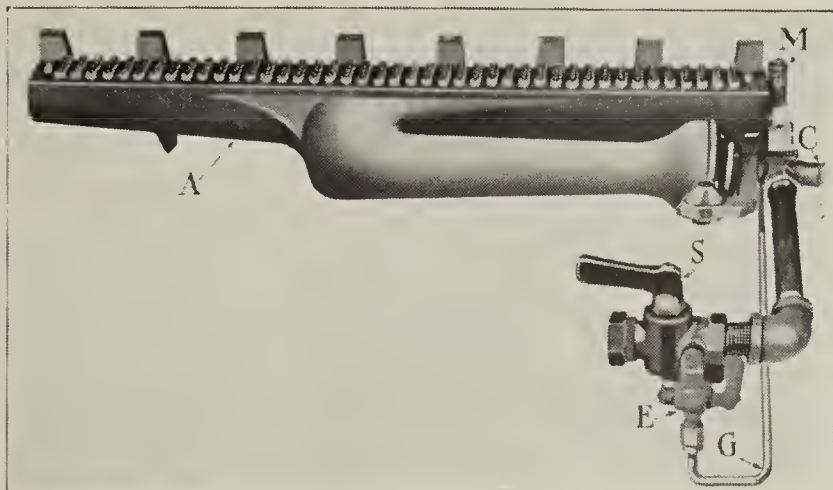
AUTOMATIC CONTROLS

Assembled Units

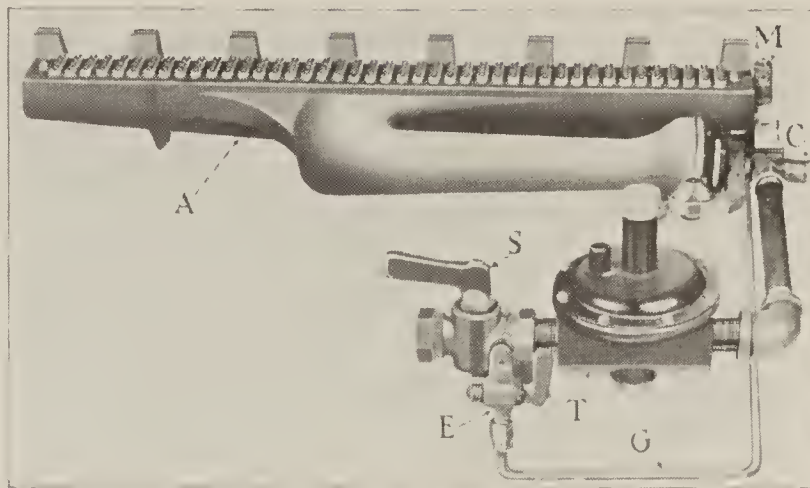
TO FACILITATE CONVERTING CIRCULATORS FROM MANUAL TO AUTOMATIC CONTROL, THE FOLLOWING FACTORY-ASSEMBLED CONTROL UNITS ARE RECOMMENDED. READILY INSTALLED ON THE JOB OR IN THE SHOP . . . NO SPECIAL TOOLS REQUIRED.



FOR NATURAL • MANUFACTURED
MIXED • LP GASES



SERIES 1-B. Standard Circulator chassis without Pressure Regulator.



SERIES 2-B. Standard Circulator chassis with Pressure Regulator.

PACKAGED CONTROL UNITS

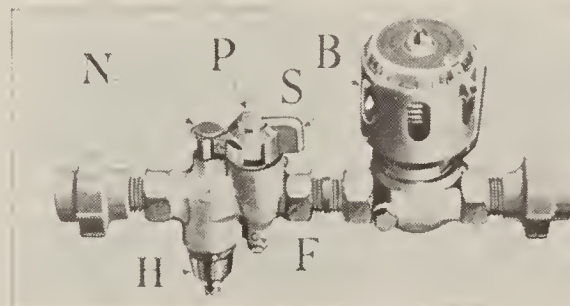
No. ZREW. Completely assembled as shown with unions for making change-over. Includes Safety Pilot (Z), Room Thermostat (RE). *Not for L-P Gas.*

No. ZRESW. Completely assembled as shown with unions for making change-over. Includes Safety Pilot (Z), Room Thermostat (RES). *Suitable for LP-Gas.*

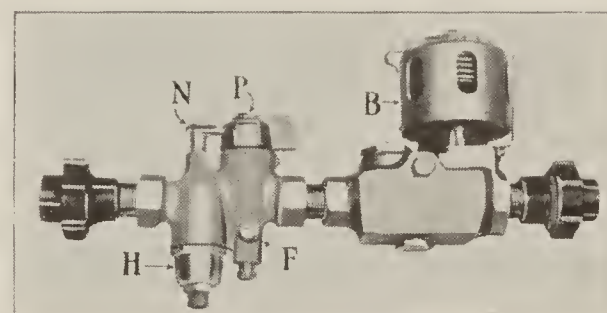
No. ZHW. Completely assembled as shown with unions for making change-over. Includes Safety Pilot (Z), Solenoid Valve, Transformer, wire, fittings, *Acra-therm* Wall Thermostat (H).

No. ZMW. Completely assembled as shown with unions for making change-over. Includes Safety Pilot (Z), Solenoid Valve, Transformer, wire, fittings, *Time-o-Stat* Wall Thermostat (M).

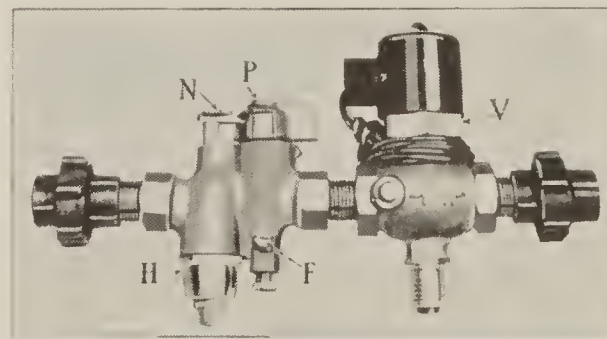
Complete Instructions With All Packaged Control Units.



UNIT No. ZREW.



UNIT No. ZRESW.



UNIT No. ZHW or ZMW.

GLOSSARY

A—Main Burner.
B—Thermostatic Valve.
C—Burner Orifice.
E—Pilot Valve.

F—Pilot Adjustment
G—Pilot Tubing.
H—Safety Pilot
M—Pilot Burner

N—Reset Button
P—Valve Handle
S—Main Shutoff
V—Solenoid Valve

QUALITY HEATING EQUIPMENT SINCE 1846



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

LITTLE GIANT CIRCULATORS

Unvented Heatmakers



MODEL No. 540.

TWO-WAY HEAT DELIVERY

IN the Little Giant there is a definite challenge . . . compare its Style, Finish, Heating Efficiency and Construction with others in the Unvented Circulator field. Note the difference. Here is a sturdy, quality built Heatmaker offering two-way heat delivery . . . yet budget priced. Quick Response, Abundant Heat Supply and Enduring Service are features.

Offered in Three Sizes

QUALITY HEATING EQUIPMENT SINCE 1846

LITTLE GIANT CIRCULATORS

Unvented Heatmakers

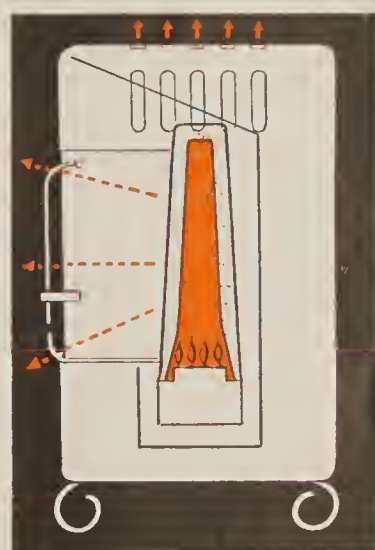


FOR NATURAL • MANUFACTURED
MIXED • LP GASES

QUICK Response and Two-Way Delivery are factors recommending the LITTLE GIANT Circulator for either day-to-day or auxiliary use. The warming comfort of this compact Heatmaker can be felt instantly upon lighting. An abundant supply of radiant heat is delivered immediately to the floor line from the full-glow radiant front. Then, as radiator warms up, a steady flow of circulated heat is delivered via cabinet louvers into the living zone.

The LITTLE GIANT is not a gas-eater. Engineered for efficiency, its effectiveness has been proven in countless installations within range of ratings listed below. It is quality built and quality equipped

throughout. Cabinets are constructed of heavy gauge steel, welded . . . are sturdy and well balanced. Burners are of high-efficiency type . . . cast in one piece of heat-resistant iron. Embossed burner ports are machine drilled . . . will not clog. Fitted with quick action valve and precision adjustments.



Note 2-way heat delivery.

Radiants are of special heat-reflecting refractory. Model No. 520 is equipped with No. R-11A Radiants. Models No. 530 and No. 540 are equipped with No. R-12 heavy duty Radiants.

Cabinets are finished in two-tone vitreous porcelain enamel . . . rich Chocolate Brown with contrasting Beige center panel . . . chrome trim.

SIZES & SPECIFICATIONS

	No. 520	No. 530	No. 540
Capacity (Btu Input)	20,000	30,000	40,000
Number of Radiants (2-in-1)	5	*6	*6
Overall Width (inches)	17 $\frac{1}{4}$	20 $\frac{1}{8}$	24 $\frac{1}{4}$
Overall Depth (inches)	11 $\frac{1}{2}$	11 $\frac{1}{2}$	14 $\frac{1}{2}$
Overall Height (inches)	19 $\frac{3}{4}$	19 $\frac{3}{4}$	23 $\frac{3}{4}$
Packed Weight (lbs.)	32	35	56

*Heavy Duty Circulator Radiants.

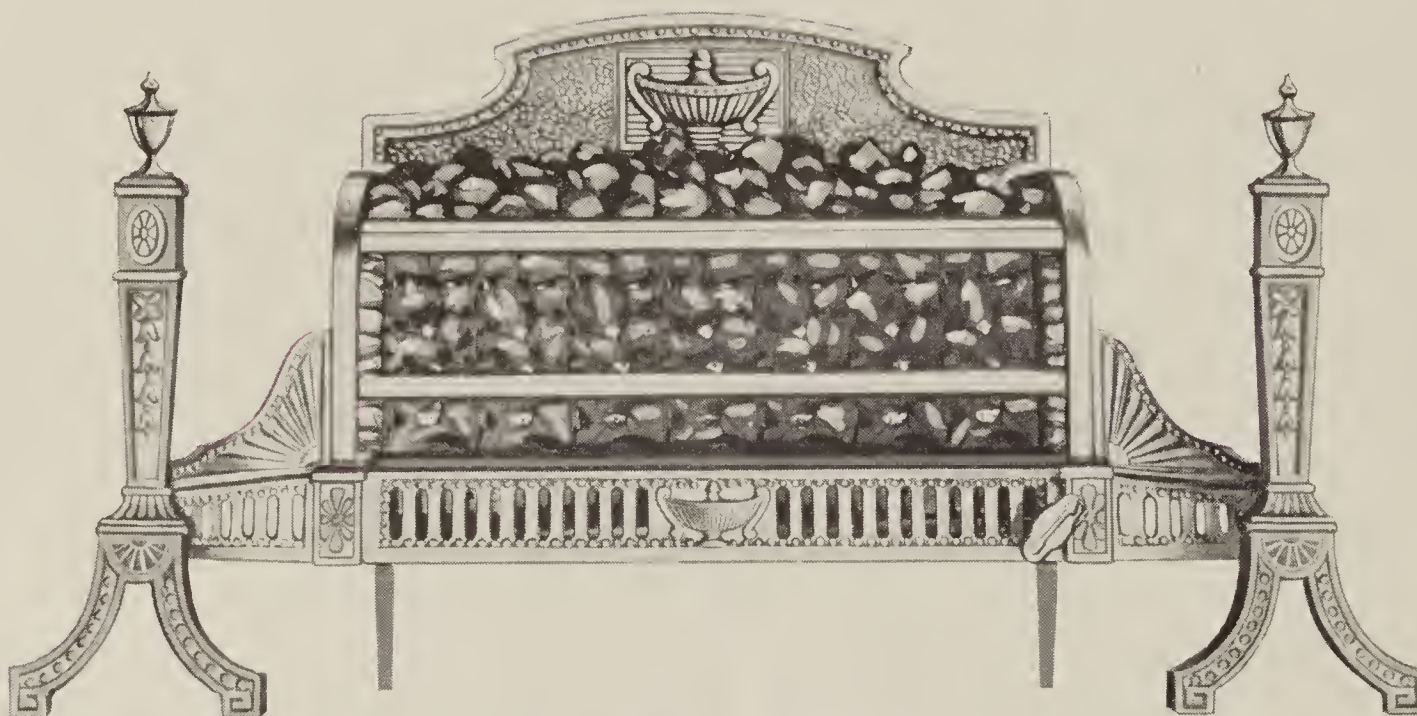
QUALITY HEATING EQUIPMENT SINCE 1816



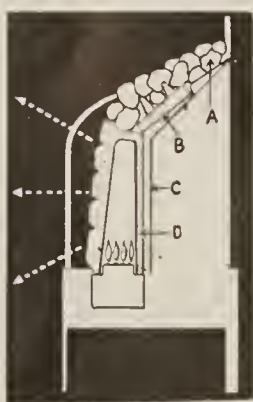
FOR NATURAL • MANUFACTURED
MIXED • LP GASES

GAS - COAL BASKET *Genuine Radiant Heater*

Patented—U. S. Patent No. 1,869,763



MODEL No. 0614.



FROM the standpoint of Beauty and Heating Effectiveness, the BRILLIANT FIRE Gas-Coal Basket is outstanding. A modern interpretation of the *English Dog Grate*, it provides all the luster and cheery warmth of the open fire yet sans the customary dirt, inconvenience and hazard. Although typically a coal fire, it is in reality a genuine radiant gas heater.

The BRILLIANT FIRE Gas-Coal Basket is fitted with replaceable Radiants (D) made of special heat-reflecting refractory. Radiants are of simulated coal design and crowned with a generous cluster of Loose Coals (A). Refractory Extensions (B) preserve circulation, insure perfect combustion. (*See Page 31 for details of Radiants, Coals and Extensions.*)

The BRILLIANT FIRE Gas-Coal Basket responds instantly upon lighting. In normal service it produces appreciably more radiant heat than comparably rated heaters of conventional design. It is equipped with high-efficiency burner, precision valve, dial type mixer adjustment and "plumb-ease" connector to simplify installation.

SPECIFICATIONS. Model No. 0614 has Input Capacity of 28,000 Btu . . . measures 22½" wide at back, 39" wide at front, 12½" deep and 21½" high. Packed weight is 70 lbs. All cast-iron construction . . . Electroplated finish.

QUALITY HEATING EQUIPMENT SINCE 1846

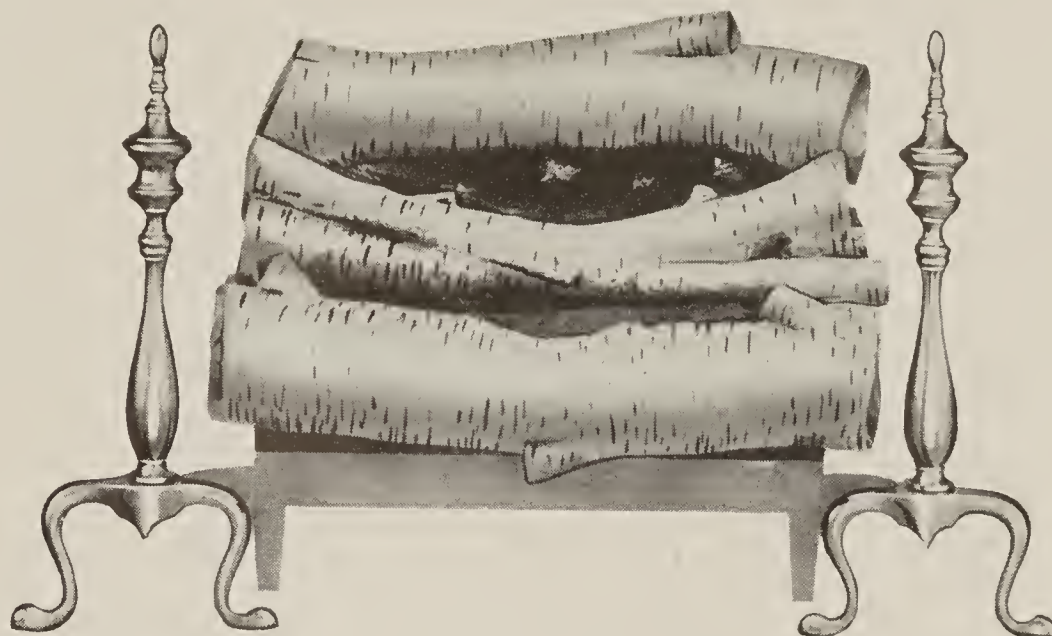
HEAT-LITE LOGS

Oak or Silver Birch



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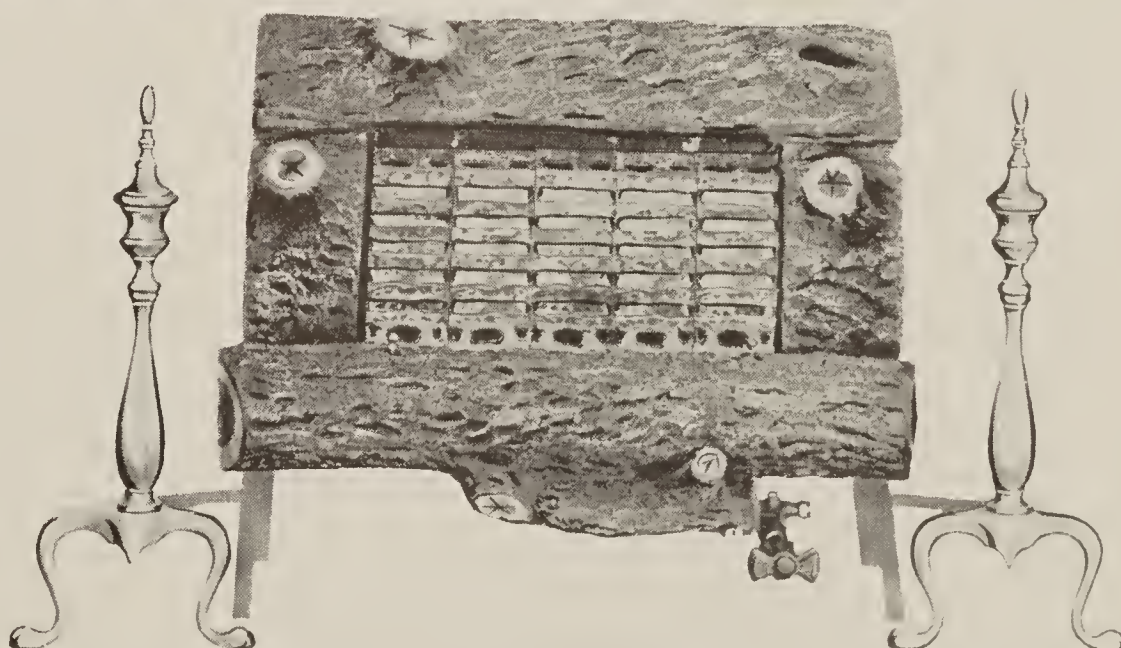
BEAUTIFUL reproductions of natural wood, either Oak or Silver Birch. Molded of special heat-reflecting refractory. Offer utility as well as ornamentation in the fireplace. Fitted with cast-iron burner . . . flames playing up in center of cluster. Equipped with illuminating device and shadow-spinner by plugging into 115 volt AC socket. Brass Andirons No. 626 (as shown) not included but must be ordered separately.



Model No.	Style	Input Capacity	Width	Depth	Height	Packed Wt.
6-B-22	Birch	20,000 Btu.	22 inches	11 inches	18 inches	48 lbs.
6-22	Oak	20,000 Btu.	22 inches	11 inches	18 inches	48 lbs.

RADIANT GAS LOGS . . . *Genuine Radiant Heater*

FASHIONED in all of nature's glamour and color, the BRILLIANT FIRE Radiant Log offers all the charm of burning logs but minus dust or spark hazard. It is a genuine radiant gas heater . . . a real heatmaker. Built of special heat-reflecting refractory . . . fitted with (No. R-7) full glow radiants. Equipped with high-efficiency burner (non-clog ports), quick action valve, precision adjustments and similar refinements. Brass Andirons No. 626 (as shown) not included but must be ordered separately.



Model No.	Input Capacity	No. Radiants	Width	Depth	Height	Packed Wt.
1-22	20,000 Btu.	5	22 inches	8½ inches	20 inches	107 lbs.
1-28	24,000 Btu.	6	28 inches	8½ inches	20 inches	157 lbs.

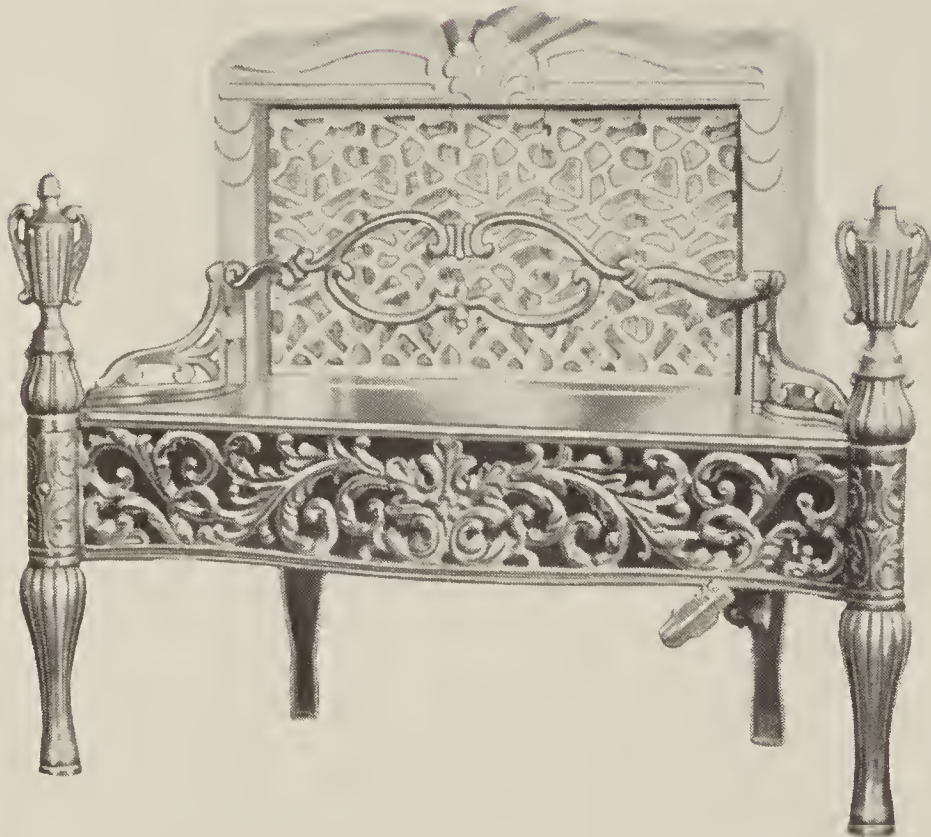
QUALITY HEATING EQUIPMENT SINCE 1846



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RADIANT HEATER No. 915

Capacity—20,000 BTU.



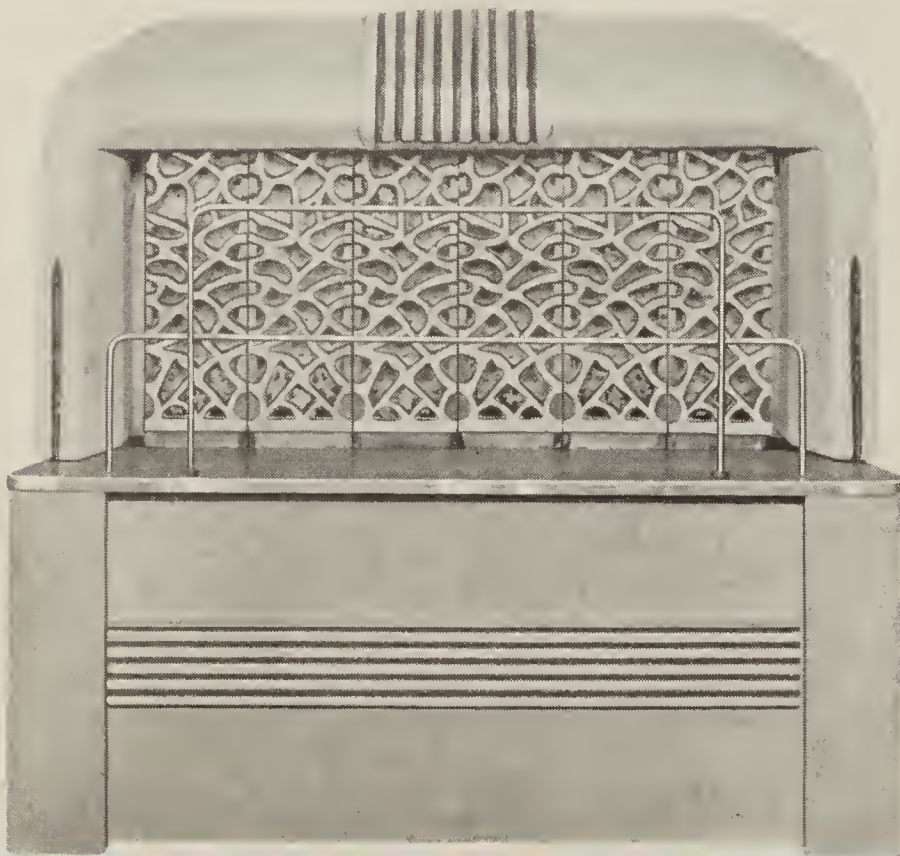
A DELUXE model for the buyer seeking the finest in fireplace heatmakers. Finely modeled wings, dress-guard and crown are of cast iron, Antique Brass finish, triple electroplated. High-efficiency burner, quick-action valve, precision adjustments, full glow radiants and Plumb-Ease Connectors are standard equipment.

SPECIFICATIONS

Model No. 915 has Input Capacity of 20,000 Btu. Measures 26" wide, 9" deep and 21½" high. Packed Weight 42 lbs. Equipped with five No. R-11-A Radiants.

RADIANT HEATER No. 666

Capacity—24,000 BTU.



DISTINCTIVE styling and advanced engineering make this radiant model one of the most effective heatmakers on the market. Deep recessed backwall introduces new means of directing maximum heat rays. Equipped with high-efficiency burner (non-clog ports), precision adjustments, dial type regulator, full glow radiants, and quick action valve. Finished in Featherweb Ivory.

SPECIFICATIONS

Model No. 666 has Input Capacity of 24,000 Btu. Measures 22" wide in front, 20" wide at back, 10" deep and 20" high. Packed Weight 45 lbs. Equipped with six No. R-11-A Radiants.

QUALITY HEATING EQUIPMENT SINCE 1846

RADIANT HEATER NO. 16

Capacity—20,000 BTU.

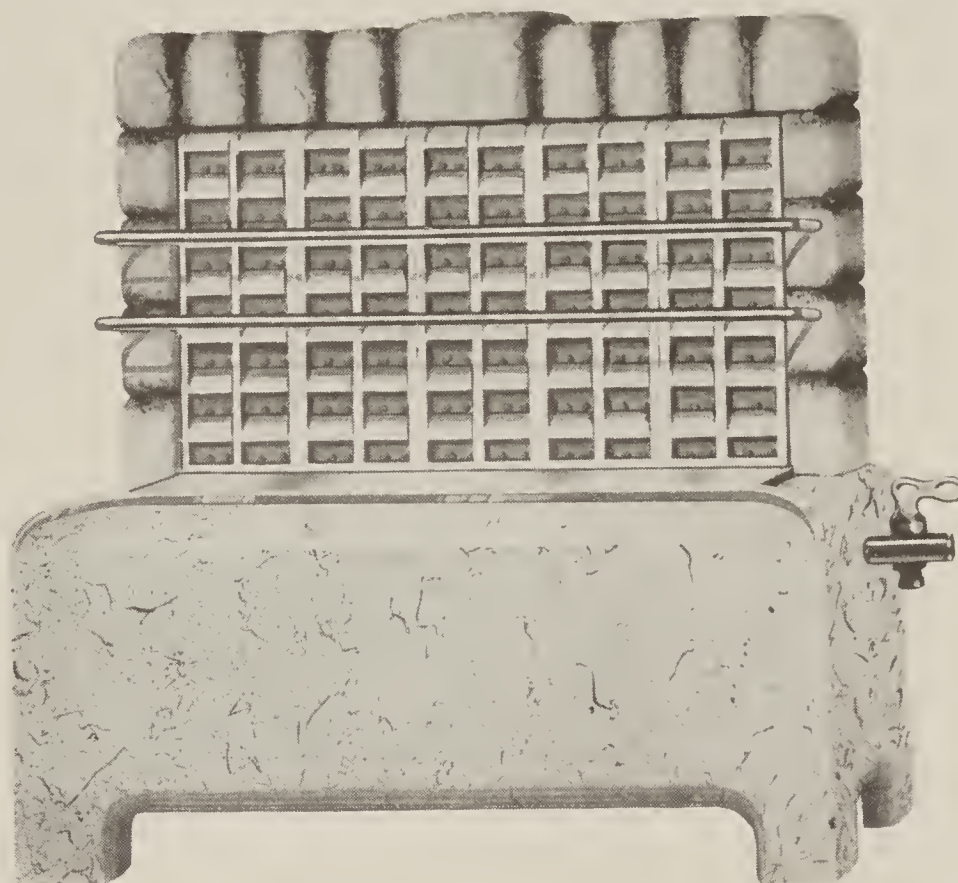


FOR NATURAL • MANUFACTURED
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AN exceptional value and at unusually low price. Regulation equipment in size and quality. Well proportioned and rugged . . . welded all-steel base. High efficiency burner, precision adjustments, quick action valve and full glow radiants. Finished in Featherweb Ivory.

SPECIFICATIONS

Model No. 16 has Input Capacity of 20,000 Btu. Measures 17½" wide, 10" deep and 17⅝" high. Packed Weight 31 lbs. Equipped with five No. R-14 Radiants.



RADIANT WALL HEATER NO. 211

Capacity—6,000 BTU.

A STURDY, compact Wall Heater with removable panel to facilitate installation. Comes complete with fire-proof wall box to fit standard studding. Wall panel is cast-iron, finished in White vitreous porcelain enamel. Fitted with high-efficiency burner, quick action valve, precision adjustments and full glow (heat-reflecting) Radiants.

SPECIFICATIONS

Model No. 211 has Input Capacity of 6,000 Btu. Wall Panel measures 12½" wide and 19½" high. Wall opening required to install this heater is 11½" wide and 18¼" high. Packed Weight 34 lbs. Equipped with two No. R-11-A Radiants.



QUALITY HEATING EQUIPMENT SINCE 1846



FOR NATURAL • MANUFACTURED
MIXED • LP GASES

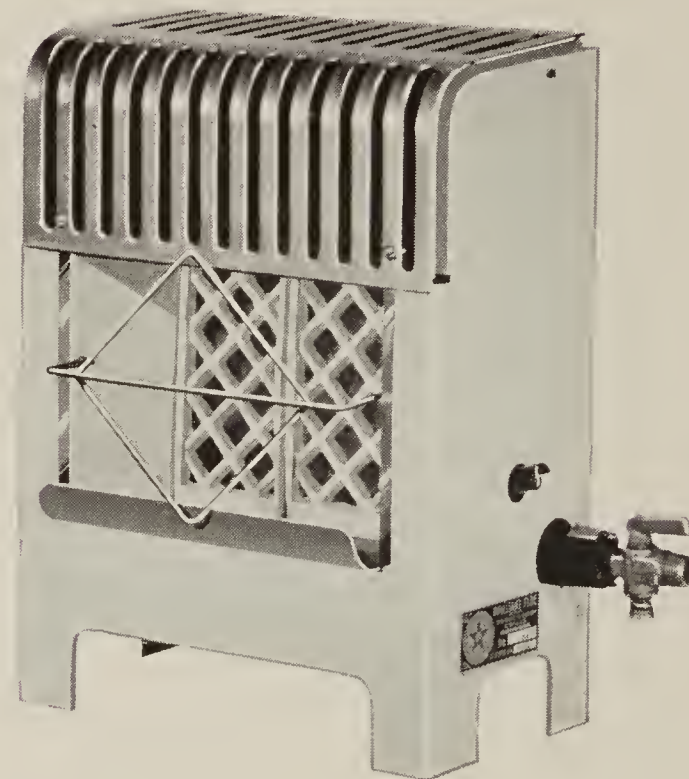
UTILITY HEATER No. 2RA

Radiant Type

AN all-around Utility Heatmaker for bath room, breakfast nook, solarium, study or general auxiliary service. Heavy gauge steel construction, welded. Equipped with high-efficiency burner, quick-action valve and full-glow radiant front. Fitted with *Vac Lighter* . . . merely hold match to lighter port and it lights instantly without fumbling. White enamel finish with Chrome Top Grille and Dress guard.

SPECIFICATIONS

Model No. 2RA has Input Capacity of 10,000 Btu (7,000 for LP-Gas). Measures 10 $\frac{1}{4}$ " wide, 5 $\frac{1}{2}$ " deep and 14" high. Packed Weight 46 lbs. (carton of 4).



UTILITY HEATER No. 110

Enclosed Type

A STRICTLY modern Utility Heatmaker, ideal for small bedroom, bath, breakfast nook or general auxiliary service. Compact yet a powerful heater. Is fully enclosed and built of heavy gauge steel, welded. Is rigid and well balanced . . . mounted on sturdy steel base. Has one piece cast-iron burner with non-clog ports, quick action brass valve and adjustable air mixer. Porcelain enamel finish . . . White body, Black base.

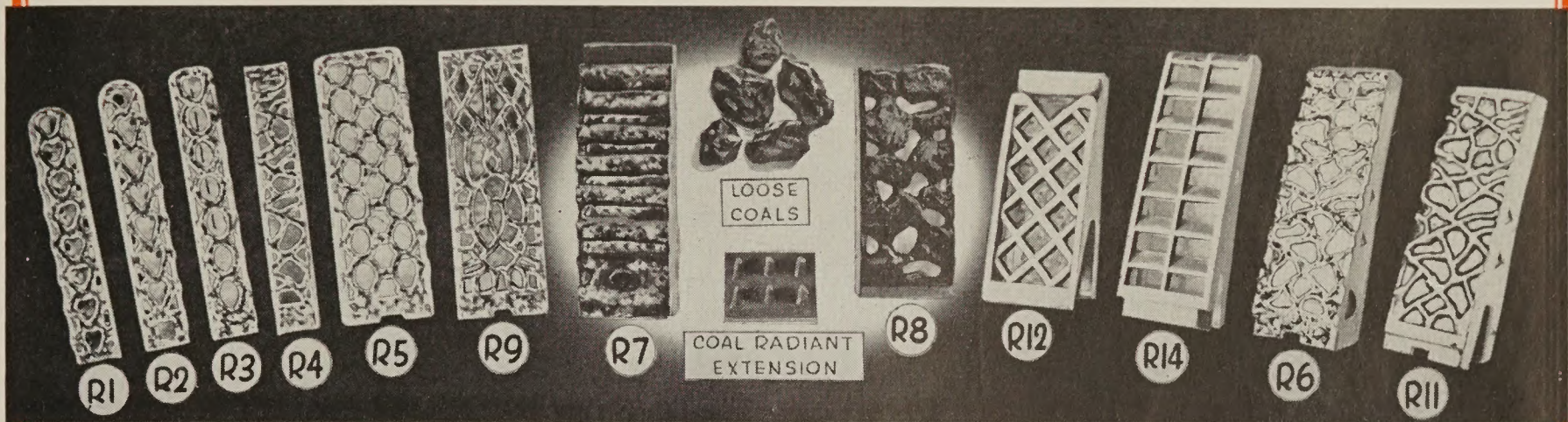
SPECIFICATIONS

Model No. 110 has Input Capacity of 10,000 Btu. Measures 10" wide, 6 $\frac{3}{16}$ " deep and 15" high. Packed Weight 48 lbs. (carton of 6).



QUALITY HEATING EQUIPMENT SINCE 1846

HIGH QUALITY REFRACTORY RADIANTS



BRILLIANT FIRE Radiants are made in steel dies . . . straight, true and uniform. They are made of highest quality refractory material formulated for gas heater service . . . are resistant to thermal shock, reflect rather than absorb heat, and resist deterioration in long service.

SIZES & SPECIFICATIONS

COLORS. Nos. R-1, 2 and 3 in white or colored. R-7 Rustic Oak. R-7A is Silver Birch. R-8 Coal Black. Nos. R-11, 12 and 14, Ivory White with brown relief. All others Multi-colored.

PACKING CHARGE is made on all orders for less than 5 Radiants of a kind.

BREAKAGE. No responsibility can be assumed for breakage of radiants in transit. Claim for breakage should be made with carried.

KEEP EXTRA RADIANTS IN STOCK AND ON DISPLAY AT ALL TIMES.

No.	Old No.	Type	Dimensions			Std. Pkg.	Pkg. Weight
			Height	Width	Depth		
R-1	No. 1	Single	7 3/4"	1 3/8"	1 1/4"	6	4 lbs.
R-2	No. 2	"	8 1/2"	1 3/8"	1 1/4"	6	4 lbs.
R-3	No. 3	"	8 1/8"	1 3/8"	1 5/8"	6	4 lbs.
R-4	Single Vine	"	8 1/8"	1 3/8"	1 5/8"	6	4 lbs.
R-5	3 Double	Double	8 1/4"	2 3/4"	1 5/8"	5	7 lbs.
R-6	174A & 5A	"	8 1/4"	2 3/4"	1 5/8"	5	7 lbs.
R-7	Oak Log	"	8"	2 3/4"	2 1/8"	2	5 lbs.
*R-7A	Birch Log	"	8"	2 3/4"	2 1/8"	2	5 lbs.
R-8	Coal 0410	"	6 5/8"	2 3/4"	2 1/8"	2	5 lbs.
R-9	193A	"	8 1/4"	2 3/4"	1 5/8"	5	7 lbs.
R-11	1938	"	8 1/4"	2 3/4"	1 5/8"	5	7 lbs.
†R-11A	1939	"	8 1/4"	2 3/4"	1 5/8"	5	7 lbs.
R-12	Circulator	"	7"	2 3/4"	2 1/8"	2	3 lbs.
R-14	Venetian	"	8 1/4"	2 3/4"	1 5/8"	5	7 lbs.
Coal Radiant Exten.			2 1/4"	2 3/4"	....	5	1 1/2 lbs.
Loose Coals			....	....	....	100	10 lbs.

*Same as R-7 except color. †Same as R-11 except without locating notch in base.

OLD HEATER PARTS & HOW TO ORDER

TYPICAL HEATER HERE HAS MAJOR PARTS INDEXED TO AID IN IDENTIFYING PARTS. ALTHOUGH MODEL DESIGNS DIFFER, SUCH VARIANCE SHOULD NOT HANDICAP IDENTIFICATION. GIVE "MODEL NO." AS WELL AS NAME OF PART WHEN ORDERING. SPECIFY QUANTITY, OTHERWISE ONLY ONE WILL BE SENT. PRICES ON APPLICATION.

- A — DRESS GUARD

B — END WING

C — HEARTH PLATE

D — CROWN
- E — BACK WALL

F — RADIANT

G — FRONT LEG

H — BACK LEG
- J — BURNER

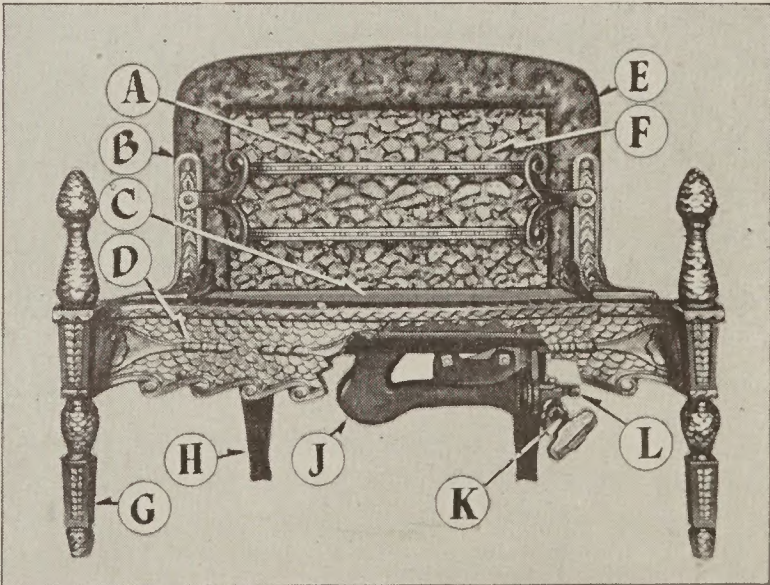
K — VALVE KEY

L — VALVE

DAMAGED SHIPMENTS

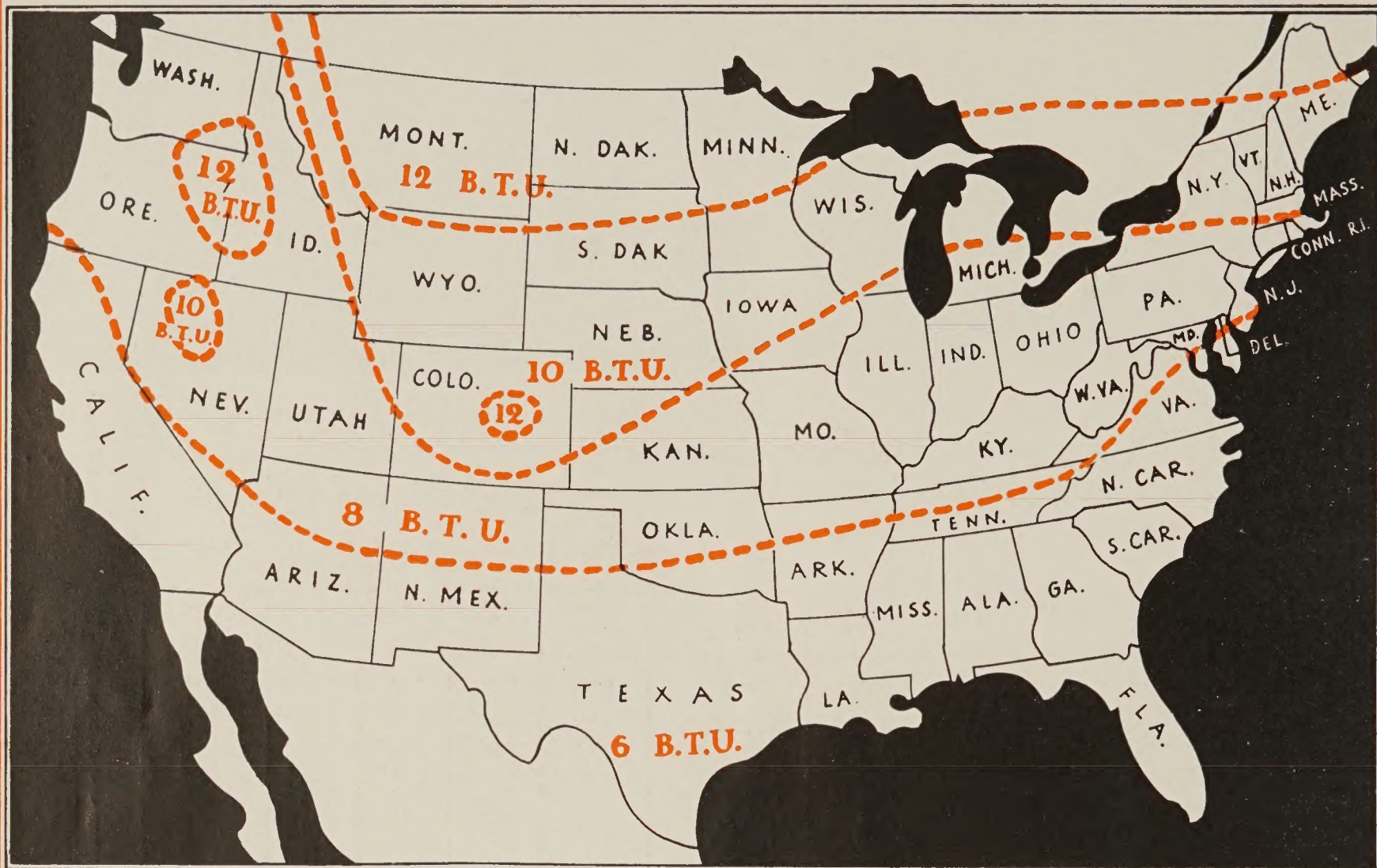
Inspection to insure proper packing of outgoing shipments is a part of factory routine, thus we can assume no responsibility for damage in transit. Claim for "Concealed Damage" may be filed within 9 months of receipt of shipment but we recommend FILING CLAIMS IMMEDIATELY. To file, five papers are necessary: (1) Copy of Carrier's Report of damage inspection, (2) Original paid freight bill, (3) Original Bill of Lading, (4) Concealed Damage consignee's form properly executed, (5) Concealed Damage shipper's form properly executed.

WE WILL BE GLAD TO FILE CLAIM FOR YOU UPON RECEIPT OF THE FIRST FOUR OF ABOVE PAPERS.



See **BRILLIANT FIRE "Service Handbook"** For Specific Parts Lists

ESTIMATING HEATING REQUIREMENTS



METHODS for estimating Heater Capacity to meet specific heating requirements are many and varied. Many of such methods entail elaborate and detailed calculations which in most instances are considered superfluous. Estimating Heat Losses of space (room or rooms) to be served is, in substance, all that is ordinarily needed. The Zone System, as here outlined, is probably the most reliable yet simple method of all for determining proper heater size to fit a specific requirement. (Refer to Zone Map shown above.)

EXAMPLE: A circulator is to be installed to heat a total room space 26' x 22' with 8' ceiling in Dallas, Texas. The total space to be heated, therefore, is 26 x 22 x 8 or 4,576 cubic feet. The Zone Map shows Dallas in the 6 BTU zone. Thus, 4,576 x 6 equals 27,456 BTU per

hour as minimum amount of heat required for this installation. Now it is only necessary to refer to Output Rating (Catalog Specifications) of circulator model preferred in order to determine proper size. In this example, either No. 50-LO or 50-TW will meet specified needs since both provide an output of 35,000 BTU per hour. If, on the other hand, physical characteristics of space to be heated make unhampered circulation difficult, selection of Model No. 4539 Fan-Forced Circulator probably would be more advisable.

NOTE: For buildings or rooms with high ceilings (over 9'), it is recommended that Fan-Forced Circulators rather than Gravity Circulators be installed to assure fullest heating comfort.

OTHER ESTIMATING FORMULAS

While the Zone Method is considered safe and conservative for estimating heat losses in average cases (frame construction without insulation), more accurate methods may reveal that Circulators of lesser capacity will suffice where improved building construction is encountered.

See BRILLIANT FIRE "Service Handbook" For Additional Estimating Methods

PROPER VENTING

***for* HEATING EFFICIENCY**

A most important factor in any heating installation is Proper Chimney Draft . . . removing combustion products of the heating appliance. Unless this is done completely, burnt gases as well as moisture will escape into the room in which heater is installed. A Circulator may be correctly adjusted and may be equipped with a good Draft Hood yet may vent into room from lack of proper chimney draft. Thus, full attention to venting of all gas appliances is important and necessary.

Piping should be same size as flue connection on heater, never less. Do not use reducers. Avoid long horizontal runs in venting, also down grade runs. Best results are obtained when pipe is graded upward from heater.

Where pipe connects to chimney, see that it does not extend too far into chimney well as this may close off or materially reduce draft. Chimney conditions should also be checked particularly if coal-burning appliances have previously been attached.

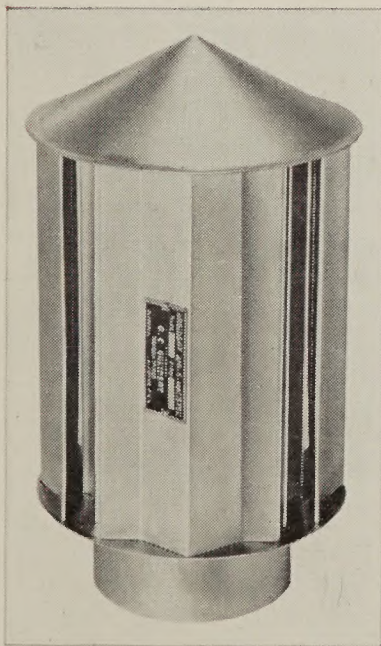
Chimney obstructions should be removed, holes, repaired, mortar voids patched. Close up unused chimney outlets. A clear, leak-proof chimney is a real economy.

When it is necessary to run flue outlet through wall or partition, a standard Wall Thimble (Fire Underwriters approved) should be installed in openings through which pipe is inserted. In such installations, Insulated Pipe instead of ordinary pipe is recommended.

When heater is installed in front of fireplace, avoid heat loss up chimney by covering fireplace opening with metal shield in which only flue pipe opening is provided. Never install Circulators so close to wall or mantel as to retard circulation. Also see that Circulator is in a level position.

Do not install damper or similar device in flue pipe. Every BRILLIANT FIRE Circulator is equipped with Down Draft Diverter to prevent excessive drafts.

DRAFT DEVICES



The Air-X-Hauster (Shown at left) is one of several effective devices designed to cure draft deficiency. This silent, simple, stationary device literally syphons off latent exhaust air and gases no matter which way the wind blows. It relies on no moving parts nor directional wind induction to function. It overcomes the usual deficiencies of vane and periscope devices. Can be installed in perpendicular or horizontal position with equal satisfaction. Operative regardless of elevation. Simply attach at the outdoor terminal of any chimney or vent and it will correct many difficult or faulty venting conditions. Practical, effective and positive, the AIR-X-HAUSTER carries off burnt gases and exhaust air by suction . . . induced by the action of outdoor wind currents. *Available through your Plumbing Distributor.*

See BRILLIANT FIRE "Service Handbook" Hints on Proper Venting

BRILLIANT FIRE HEATERS

Known From Coast To Coast



A Worthy Product designed, engineered and manufactured in one of the nation's great Industrial Centers where facilities are plentiful . . . Skilled Labor, Steel, Electric Power, Gas, Coal plus Rail, River and Highway Transportation Arteries.

"QUALITY HEATING EQUIPMENT SINCE 1846"